A Week in the Isles of Scilly.

Ex Libris
C. K. OGDEN

LIGHTHOUSE IN COURSE OF ERECTION ON THE BISHOP ROCK,

as it appeared previous to its total destruction in the terrific storm on the night of the 5th of February 1850.

A Week

IN THE

ISLES OF SCILLY.

Vos et Scyllæam rablem, penitusque sonantes
Accêstis scopulos: vos et Cyclopia saxa
Experti: revocate animos, mœstumque timorem
Mittite: forsan et hæc olim meminisse juvabit.

BY

I. W. NORTH, M.A.

CHAPLAIN.

PENZANCE:

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Preface.

THE character of the book, here submitted to the reader, has been somewhat altered by circumstances which have occurred since its publication was first contemplated; since, indeed, the former part of the work was in print. It was originally intended to be nothing more than a guide-book for tourists and visiters, directing them to the chief objects of interest in the Isles of Scilly. The earlier excursions furnish evidence that this was my first design. But this intention was changed by the unexpected offer of some valuable contributions on the Natural History of the Isles, and by fear on my part that the account given of the islands would be thought dry and unattractive. I was, therefore, led to consult the works of others, with the object of enriching my pages from the materials collected by men of research and eminence.

The paragraph quoted by Borlase from Leland's Itinerary in page 124, may be found in the fourth volume of Davies Gilbert's History of Cornwall, page 266. The other notices of 'Scylley' are highly curious; but it scarcely fell within the compass of this work to make any further quotations from this ancient writer.

From Carew's Survey of Cornwall, first published in 1602, much cannot be gathered of the History of these Isles. Carew, indeed, professes not to include them in his work; but he briefly adverts to the fabled land, the Lionesse, said to have formerly united the Isles with the main land. "Lastly" he observes, speaking of the changes which the County of Cornwall has undergone, "the encroaching sea hath ravined from it the whole country of Lioness, together with divers other parcels of no little circuit; and that such a Lioness there was, these proofs are yet remaining. The space between the Land's End and the Isles of Scilly, being about thirty miles, to this day

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retaineth that name, in Cornish Lethowsow, and carrieth continually an equal depth of forty or sixty fathom (a thing not usual in the sea's proper dominion) save that about the midway there lieth a rock, which at low water discovereth his head. They term it the Gulf, suiting thereby the other name of Scilla."* He mentions also the Garrison as "a fort at Scilly, reduced to a more defensible plight by her Majesty's order, and governed by the foreremembered Sir Francis Godolphin, who with his invention and purse, bettered his plot and allowance; and therein hath so tempered strength with delight, and both with use, as it serveth for a sure hold, and a commodious dwelling."† One other reference to the Isles I have found in the Survey, which is of importance, as showing at how early a period they were regarded as an object of ambition, even by crowned heads. "At Saint Buriens," Carew writes, "a parish of great circuit, King Athelstane accomplished his vow, in founding a college of priests, what time he had conquered the Sillane Islands." ‡

From Borlase I have made several extracts. It seemed, upon reflection, wrong to leave unnoticed the legends of Druidical remains, said to be existing on the Isles. In directing attention to some of the principal rocks I could not but observe that they have been regarded as objects of superstition. And this remark almost naturally drew me to the pages of the Antiquarian. I have quoted freely both from the Antiquities of Cornwall, and from Borlase's Letter to the Dean of Exeter.

It will be seen that I have, inadvertently I confess, transcribed from the pages both of Drew and of Davies Gilbert an account of the disaster which befel Sir Cloudesley Shovel. The former gives the whole story at length; the latter throws discredit upon it. The reader will be enabled to compare the opinions of the two, and to form his own upon the subject.

From Troutbeck and Woodley I have not hesitated to take whatever appeared to be of value.

To Lady Sophia Tower I beg to tender my grateful acknowledgements for her tasteful embellishment of my book. The kindness, which she has shewn in preparing her beautiful drawings for the Lithographer, has laid me under great obligations.

For myself I must take leave to express unaffected regret that the part which I have had in the work, is unworthy of the Papers, which have been put into my hands, and the assistance so kindly given. Unexpected facilities have been afforded for making my account of these interesting Isles both accurate and full; and I embrace this opportunity of expressing my obligations and offering my thanks to those gentlemen whose careful and exact information give a substantial value to the following pages.

* pp. 6, 7. † p. 215. ‡ p 386.

The visits paid to the Isles by Mr. Carne, Dr. Carus, and Mr. Cooke, were exceedingly opportune for the completion of my work. The valuable contribution, which closes the book, has been very kindly furnished by the former of these gentlemen, who bears strong testimony to the sanative virtues of the Islands.

Dr. Carus was induced to take up his residence amongst us with a view to obtaining specimens for the Anatomical collection in Oxford, under the direction of Dr. Acland, who is Lee's Reader in Anatomy at that University. Dr. Acland chose the Isles as the seat of the first embassy from the Anatomical Museum, because this locality had not been previously explored; and because the Geographical position of these Islands, at the entrance, as it were, of three seas, the Bristol, the Irish, and the English channels, together with their proximity to the current called Rennel's, awakened in him a hope that some curious and interesting results might be hence obtained.

Mr. Cooke came, as it were, accidentally, for the sake of seeing the Isles and examining their botanical features.

The height of the prominent objects in the scenery has been supplied by Serjeant Steel, who in the summer of this year was stationed in the Isles, in command of a detachment of the Royal Sappers and Miners, for the purpose of measuring a degree of longitude from the most Southern point of England to the Isle of Rona, the most Northern of the British Isles in this meridian.

These several heights were determined by observing the angles of elevation and depression from the Balcony of the Light-house on St. Agnes. The precise height of the Balcony above mean water was found, by levelling from the North side of Priglis, to be one hundred and forty five feet. The distances used in the computations were taken from Spence's chart, published in 1810; and one fourteenth of the contained arc has been allowed for refraction.

I did not receive the information, which Serjeant Steel very readily gave, until the work had made some progress. I was, therefore, under the necessity of omitting some of the measurements which were thus furnished for my use or of inserting them in the Supplemental Chapter. The latter plan I have adopted.

I have adhered in great measure to the plan expressed in the Title, which I had long ago fixed upon as most suitable to my work. Nor would I allow myself to deviate so far from my first purpose as to enter into any lengthened discussion upon irrelevant questions; such as the origin or probable meaning of names, &c. I ought, perhaps, to have fortified the opinion which I have given as to the origin of the word "Scilly" by referring to Davies Gilbert, who speaks of the Isles as deriving their name "probably

from the abundance of eel or conger fishes taken there, called Sillys or Lillis.*

Some persons will, I dare say, be of opinion that I have entered too much into detail. It may be so. My intention, however, will not be blamed. I wished, as far as possible, to answer every question which it was likely that a visiter would propose; and, if I am too minute, the error is, I believe, on the right side. This desire has obliged me to crowd into the Excursion of each day more than can be conveniently accomplished in so short a space of time; and will, I hope, be deemed sufficient apology for the length of the preface and for the supplemental chapter.

Some delay has been occasioned in bringing out the book by my inability to hold personal communications with the Printers and Publishers. It will be readily acknowledged that there is much disadvantage both to myself and the Publishers in being so far apart from each other; or rather in having a difficult sea rolling between us. This will, I trust, be admitted as somewhat of an excuse for the Errata, which I am compelled to insert. It is material to correct the statement made in the fifth page, by observing that a second vessel, the "Ariadne," now sails between the Isles and Penzance. The "Ariadne" sails from the Isles on Monday and from Penzance on Friday in each week.

As there is a propriety and significance in the names given to places and objects in the Isles, I subjoin a brief vocabulary, which may be of use to my readers.

Brea Brê signifies 'a mountain'; and hence the name of Bryher, originally Brehar. "This island" says Borlase "is very mountainous; whence its name, in Cornu-British signifying a high mountain."

Carn or Cairn signifies 'a shelf in the sea' 'a heap of rocks.' The carns are a striking feature in the scenery of the isles.

Carreg is 'a rock' This word probably enters into the composition of Carrick-starne, the bold rock in the sea on the southern side of St. Mary's, fronting the Pulpit rock. Start i.e. 'firm,' 'fast' may guide us to the meaning of the last syllable.

Guêl or Huêl "in Cornish signifying a working for tin" may perhaps give its name to the Western hill of Bryher and to the islet which lies opposite to it.

Guen signifies a plain or down. Guêe is green, lively, flourishing. May not that part of St. Agnes which is called the Gugh derive its name from one of these words?

Helak (helik) is a willow tree. Hence Porth Hellick.

* Davies Gilbert's Hist. Cornwall. Vol. iii. p 430.

Helek 'moory,' 'marshy.'

Lêh is 'a flat stone.' Carn-lêh is a group of flat rocks.

Logan means 'shaking,' 'rocking.'

Maur, when compounded with another word, Vaur, signifies great; and this helps us to the origin of the word Menavawr, which has been corrupted into Menavore, alias Man o'war, from the fancied resemblance of this noble rock to a ship in full sail.

Meinek which probably gives its name to the beach near Old Town, Porth Minick, means 'stony.'

Men, Min, and Pen, which are the first syllable of so many words, signify 'a head' 'a hill;' 'stones;' 'a promontory.' "A point of land was in Cornish called Pen." *

Morva signifies a place near the sea. Hence Carn Morval.

Scilly is, in Pryce's Vocabulary, rendered, cut off. He adds "from hence the Scilly Isles. Cut off from the Insular continent." This does not appear the probable derivation of the word.

Tre is an original British word, and means 'a town,' 'a gentleman's seat.' Davies Gilbert defines it "a dwelling place, or an assemblage of dwellings and, therefore, a town." Trenoweth, St. Mary's, means 'new dwelling-place,' nowydh or noweth signifying 'new.' Thus also Tresco is 'the place of elders,' scao meaning in the Cornish language 'an elder tree.'

Vean and Vear, which form the latter syllables in the names of two of the Western isles, signify respectively little and great; Vear being the same with Veor. Ros, a mountain, is, probably, the former syllable in Rosevear and Rosevean.

* Davies Gilbert's Hist. Cornwall. Vol. iv. p. 317.

St. MARY'S, ISLES OF SCILLY,
SEPTEMBER, 1850.

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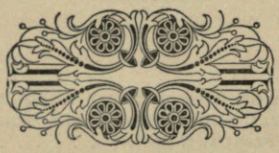


Introductory Chapter.

THERE are several works on the Isles of Scilly, larger and more elaborate than this. But they do not seem to supersede the necessity of a smaller book, which may serve as a manual or guide to some, who have not leisure to consult fuller and more detailed accounts. The information here supplied is of quite a different character from that which the antiquarian or the lover of research desires. He may be referred to Borlase, Heath, Troutbeck, or Woodley; and from their pages he will gather many curious and interesting particulars of these Islands. But it has often occurred to the author of this volume, during a residence of some years in these pleasant isles, that a book such as that now offered to the public is much wanted.

Little is generally known or thought of this Western extremity of England, notwithstanding the existence of so many works on the subject. The publication of some beautiful sketches made in the summer of 1848, by Lady Sophia Tower, who has kindly lent her aid to adorn and

enrich this little book, can scarcely fail to draw the attention of tourists to Scilly; and to inspire in them a wish to become acquainted with scenes so various and replete with beauty. For it is this which must strike every visiter. There is nothing common or ordinary in the scenery of the Isles. Where will you look for anything of precisely the same character or kind? A cluster of Islands in the midst of the sea, abounding in fine, bold views, and possessing every advantage of harbours, soil and climate, and inhabited by a race of people who speak the English language with a remarkable purity of accent, and who are well skilled in the arts of agriculture and shipbuilding, as well as in those other trades, which are necessary to the comfort and convenience of life.

From whom are the inhabitants descended? Of what country were their earliest ancestors? What was the old, classic name of the Islands? Are they the Cassiterides mentioned by Pliny and others, and of which Herodotus,* with his usual frankness and caution, confesses himself to have been ignorant? †

* Lib. iii. 115.

† Any one who wishes to discuss this question and to know the opinions which have been advanced upon it, may with advantage consult the Appendix to Facciolati Lexicon, under the word Cassiterides. One paragraph I venture to quote. "Pro Sorlingis vel Siluribus insulis accipiendas esse Cassiterides censuit vir plurimæ his in rebus auctoritatis Camdenus nostras: quæ insulæ sitæ e regione Cornubiæ promontorii Lissæi, numero plus minus sunt centum et quadraginta quinque, gramine amœnæ, avibus aquaticis abundantes, stanni quoque non parum feraces, unde antiquum illis nomen. Earum decem extantiores sunt, quarum omnium maxima est St. Mary's." "Our Camden, than whom there is no greater authority on these subjects, is of opinion that the Cassiterides are the Islands intended by the Sorlings or the Silures: which islands, situate directly oppo-

On such points of enquiry, it is not the object of the writer to enter, or even to give his opinion. His design is obvious. He brings the visiter to the islands, and leads him from place to place, telling him where to go and what to see. He has endeavoured to be exact; and whatever faults may be found with his work, he is not conscious of any incorrect or inaccurate statements. The orthography of the names of islands and places is that used in a survey of the Scilly Isles by Græme Spence, 1792.

The title which has been adopted for this little book, does not by any means imply that one week will suffice to explore all the beauties of the islands. A much longer period, even a whole summer, might be spent in this remote and unfrequented part of Cornwall. Nor would the time drag heavily along, as is so frequently the case in all the monotony of our more fashionable watering places. There is, on the contrary, a greater variety of enjoyment offered to the visiter, if he is in search of pure air, healthful exercise, picturesque views and bold scenery, within the circuit of these islands, than can be found in places of more general resort.

It has frequently been the practice of tourists to regard the Isles of Scilly as a place to be visited, if there are a few days for which no better occupation can be found, when they have seen the Land's End and St. Michael's Mount, and the other objects of interest in the neighbourhood of

site to the Lizard in Cornwall, are about a hundred and forty five in number, charming in their verdure, abounding in water fowl, yielding not a little quantity of Tin, whence their name is derived. Of these islands ten are more conspicuous than the rest, of all which, St. Mary's is the greatest."

Penzance. Or, it may be, they have availed themselves, if they happen to be in the West of England of "an excursion to the Scilly Isles," advertised by the owners of the steam packets, which sail between Hayle and Bristol; and have thus paid a hurried visit, sufficient only to convince them how great is the mistake of supposing that two days can afford an opportunity for seing the many objects of interest which are here to be found. A glance at the contents of this volume will show that such a trip, however agreeable to some who love a sea voyage, is altogether insufficient for those who wish to gain any tolerable acquaintance with the interesting scenery and fine rocks which give a peculiar beauty to Scilly. For this purpose a far more leisurely survey is required; and it will save disappointment to such visiters, if they will previously enquire what attractions the Isles present, and what accommodation they offer for a longer sojourn. The attractions which the Isles present, it is the especial object of this book to show; but of the accommodations which they offer a few words may first be said.

Let it then be known for the comfort of all, who think of Scilly as only an assemblage of ship-destroying rocks and fishermen's huts, that there are several inns at St. Mary's where every comfortable entertainment may be had. The principal are those kept by Mumford, Bluett, Hicks, and Ellis. Here as well as in some private lodging houses, visiters will receive all requisite attendance, and at moderate charges.

The communication between the main land and the Isles,

is on the whole regular and certain. The Lionesse Packet, so named from the tradition that the Isles of Scilly were once joined to the main land of Cornwall by an isthmus called the Lionesse,* is a comfortable vessel; under the care of able and experienced seamen, who are ready to show all kindness and attention to their passengers. Of one thing it is necessary to apprise all who intend to sail in her. She carries no store of provisions. It is, perhaps, a just cause of complaint that the master declines the risk of purchasing supplies of food for those who take a passage with him. He alleges as his excuse the roguery of some who, having regaled themselves at his expense, afterwards refused to pay for what they had eaten. But it matters not what is the cause; the result is simply this, that you will have nothing to eat, however hungry you may be, unless you lay in a stock before you embark. At present the Lionesse sails from Scilly on Monday and Friday, and from Penzance on Wednesday and Saturday.

If the wind is favourable, the voyage from Penzance to Scilly will occupy between five and eight hours, though it is sometimes made in even less than five hours; and, as the Packet sails at nine o'clock, a. m., the visiter will, in all probability, reach his destination sometime before sunset. The Isles are a peculiarly striking object as the vessel nears them from the mainland. Those first approached are St. Martin's and the Eastern Isles. On the eastern end of St. Martin's is placed a day mark, which is a conspicuous

* The reader will find in Woodley's pages an elaborate discussion of this curious question, which can hardly find place in this work.

object as the sailor presses towards this dangerous coast; and warns him to keep a respectful distance from the ledges and rocks which would otherwise put his bark in peril. As the vessel holds her course towards Crow Sound, the channel by which at or near high water she enters The Road, a high conical rock, called Hanjague, presents itself. Passing this you reach in quick succession a group of isles, which both in situation and appearance have remarkable features of beauty. Having entered The Road your eye will at once be drawn to the rock which gives its name to the channel between St. Mary's and the Eastern Isles. The Trinity brethren have recently placed a beacon upon the Crow Rock, before which the entrance to The Road by this channel was extremely hazardous. A similar beacon has been erected on the Woolpack, at the entrance of St. Mary's Sound; which course a vessel is obliged to take when there is not sufficient depth of water over the bar of sand in Crow Sound. Assuming that you are so fortunate as to gain the harbour by the shorter course, through Crow Sound, the opposite shores of Tresco with the white sandy beach will presently engage your attention. The large stone building which stands on somewhat higher ground is The Abbey, the residence of Augustus Smith, Esquire, the Proprietor of the Isles.

On the coast of St. Mary's, nearly opposite the Abbey, you will observe a fine mass of rocks called Carn Morval. This Carn which forms the cliff, is of considerable height, and very bold. Near it are the remains of some batteries;*

* Troutbeck.

and its precipitous sides point it out as an almost natural fortification and bulwark of the harbour. It needs the experience of a good pilot to bring a vessel safely into the Pool. The channel lies between two rocks, of which the larger is called the Cow and the smaller the Calf. To the South West of the Cow is a dangerous reef of rocks called Bacon Ledge, which must be carefully avoided. Between this ledge and the Cow there is a good channel for vessels coming into the port from the West or South, through the Broad Sound or St. Mary's Sound.

The Pier, near which the Packet comes to an anchor, was built at the same time as the present Church, in the years 1835—38. It is, as you will soon have an opportunity of seeing, far more commodious than the old pier: nor will it fail to surprise those who consider the subject, that the islands should have been so long without the protection and benefit of such a pier as they now possess. The water within the ledges bearing the names of the Cow, the Calf and Bacon Ledge, is called The Pool, and every where offers good anchorage. So also does The Road to the Northward of those rocks, where there is seven or eight fathoms of water.

Following the plan which has been proposed, I shall briefly mention the principal objects of interest in the Isles; so arranging them that a visiter, who has but one week at his command, may, wind and weather permitting, form a just opinion of their beauty. We will allot the first four days to an examination of the off islands, as they are

called, i.e. those lying at some distance from St. Mary's; reserving the last two days for exploring St. Mary's, the principal island.

First Excursion.

Our first excursion shall be to Samson and Bryher. Starting early in the morning, for we have much to see, we will desire the boatman to steer us across The Road in a westerly course, for the former of these islands.

At a distance of three quarters of a mile from Samson, and about the same distance from Tresco, is the conspicuous Nut Rock, the mark for pilots bringing vessels to the main anchorage. Those two hills before you, to the most southerly of which we will direct our boat, are the Isle of Samson. You will find a convenient landing place on the eastern side of the island.

Woodley says "There are strong grounds for supposing that Bryher and Samson were formerly united, as they are connected by sands which are passable at low water, and, on the shifting of which, the remains of hedges have been discovered in places which are now more than twelve feet under water at high tides. Some ruins of houses are also still visible in the sands on the shore." It is far more

probable that Samson was once united to Tresco; as there is much deeper water between Samson and Bryher than between Samson and Tresco.

There are no longer vestiges of houses visible on the shore of Samson; but the remains of hedges are both here, and at St. Helen's and Teän, which lie between Tresco and St. Martin's. In Woodley's time there were "seven houses and thirty-four inhabitants" on this isle. There are now but three or four houses, and proportionably fewer persons; it having been deemed advisable to remove the inhabitants, as opportunities offered, to St. Mary's, that the parents may have greater facilities for gaining their livelihood, and that the children may enjoy the benefits of education. A visit to their cottages will show you that such a change was on every account desirable, although it is gratifying to see the comfort and sufficiency which the present residents on this isolated spot enjoy.

Ascending the highest point of land, you will gain a commanding view of the Isles, and at one glance, take in their relative situation and proportions. St. Mary's is seen to great advantage with its Church and harbour, the Garrison surmounted by the Star Castle; St. Agnes with its distinguishing feature, the Light-House; Annet stretching out towards the West, with its jaggy extremities, like so many hay-cocks. Looking over its outer-most point to the West, you will see the Bishop Rock, on which the elegant Light-House which forms the frontispiece *was* in progress of erection.

The rock which stands nearly due West from Samson is

Mincarlo; those more to the South are Little and Great Minalto. That most to the West is Maiden Bower; and to the North of Maiden Bower stands the rock which has given its name to this our English Archipelago. Of the origin of this name it is easy to form conjectures; but as nothing is definitely known, it may be left to each person to entertain his own opinion. The most probable solution however is, that it derives its name from Silya which is the Cornish for Conger.* In reference, probably, to the traffic of the inhabitants in this fish, the bay on the North side of St. Agnes is called Perconger, i. e. Porth Conger.

Scilly is a flat islet of massive rock, divided into two parts by a deep chasm, through which the water flows. Each part is surmounted by a small lump of rock, styled the North and South Cuckoo. It is with great difficulty that a landing is effected on Scilly or on any of the neighbouring rocks, from the strong tides which run between them. It can be accomplished only when the weather has been for some time very calm.

Between Maiden Bower and the isle on which you are standing are the Seal Rock, Illiswilgic, and Castle Bryher. The last rock is a conspicuous feature in the scenery, and arrests attention whenever the eye is turned in that direction. Its bold and rugged summit rises finely above the low lands of Samson and is seen from The Road and almost every island of the group. Between the isle of Bryher and Scilly is an uncultivated islet, called Gweal, containing seven acres.

* For this information, and the conjecture founded upon it, I am indebted to Augustus Smith, Esq.

From this picturesque group of rocks the eye will quickly travel to Bryher, with its White Church, and Tresco, with Oliver Cromwell's Castle. Having thus from a distant height surveyed this portion of the group of Islands, you will perhaps be disposed to rejoin your boat, and seek to gain a nearer view of the several rocks and islets. If the wind and tide permit a close approach to Castle Bryher or those other rocks, in the midst of which it stands, the visiter will be better able to judge correctly of their magnitude; and their dimensions will surprize him. Castle Bryher, for instance, is between fifty and sixty feet in height. Maiden Bower is a fine bold rock, and Scilly is acknowledged to deserve the name of an Isle.

When you have seen as much of these outstanding rocks and isles as your time permits, you should make for the Northern promontory of Bryher, called Shipman Head.

By taking this course the visiter will leave unnoticed the Southern and South Western portions of this Isle. He may not deem it necessary minutely to inspect every bay or promontory; more especially as the prospect from the Town Hill, to which I propose to bring him by and by, will show sufficiently the chief objects of interest in the island. For the benefit, however, of those who neither lack time nor inclination to make the complete circuit of Bryher, I will enter into a more particular description of its various parts.

The Southern Hill is called Samson Hill; and the bay which lies nearly due South on the Western side of this hill is marked in the map, Rushy Bay. This appears a more reasonable name than Russia Bay, by which it is mentioned

in Woodley's history; for which he very properly says, "it were vain to enquire the reason." Doubtless the name was suggested by the growth of rushes on that part of the island. On and about that spot, more than any other on Bryher, bunches of rushes are, I am informed, now to be found.

The bay, which lies at the West South West corner is Stony Bay; deriving its name from the shingle* with which its beach is covered. Colvel Rocks are in a line with the Southern promontory by which this bay is terminated, and Heath Point is its Northern, or rather North Western boundary.

Between Heath Point and the next high land, which is Gweal Hill, so named from the islet lying opposite to it, is Long Bay, commonly called Great Porth. At low spring tides you may easily walk from Bryher to Gweal.

Near the Northern extremity of Great Porth, and to the East of Gweal Hill, "is a fine lake or pond of fresh water, covering a space of between three and four acres, but subject to brackishness by the spray of the sea."† Woodley somewhat over estimates the extent of this pool, which does not, most certainly, cover more than two acres.

There is also a spring of fresh water in the North West part of the island which issues out of the cliff on the sea shore. Troutbeck says that it "affords the only stream of fresh water in this island." Woodley in his work states that "it is too remote to be of service and is difficult of

* Shingle, small smooth stones. This word is, I believe correct, though I cannot find any authority for its use in this sense.

† Woodley.

access." However this may be, the spring is remarkable for its purity, and is often resorted to by those who are suffering from wounds or sores. Its sanative power is generally understood and acknowledged. The bay itself is also worth visiting; nor must we omit to notice the peculiarity, which both Troutbeck and Woodley have mentioned, that "upon this spring the sun never shines:" the cause of this marvel being that the portion of the cliff, from which the spring wells forth, is so situated that the sun does not reach it in any season of the year.

The Western shore of Bryher presents to those, who view it from the water, a great variety of scenery, in a succession of high lands separated by deep bays from each other. The cliff is very bold at Shipman Head, but you may conveniently land, on either the Southern or the Eastern side. The South East side is the best. The rocks which form this head-land deserve a close examination. The outer extremity of Bryher is separated from its main-land by a yawning chasm, which at the narrowest part is about twelve feet wide. It is called the Gulf; "the sides of which are nearly perpendicular and appear to have been rent from each other, rather than worn by the washing of the tide." * The highest point of Shipman Head is upwards of sixty feet.

The Northern hill of Bryher, which Troutbeck describes as "the roughest and most mountainous of all the Scilly Islands," offers a very uneven surface and but a dreary walk to the pedestrian. He may, therefore, well avoid it, and make his way along the Eastern, or, more correctly, the

* Woodley.

North Eastern side of the island. This side of Bryher and the Western coast of Tresco form the harbour of New Grimsby. The Rock, which when viewed from a distance seems to stand nearly in the middle of the channel, but which may be reached on foot from Bryher at low water, is called Hangman Isle; from the circumstance, as Troutbeck tells us, that some mutinous soldiers were hanged there by the Parliament forces in the great rebellion. Nearly opposite upon the shore of Tresco stands Cromwell's Castle, which is kept in substantial repair by the Board of Ordnance.

The walk along the coast of Bryher in a Southerly direction offers a continual succession of fine views. Large masses of rock project from the cliff, overhanging New Grimsby, and at its base is a path, which will presently bring you to the foot of the Watch Hill. This you should ascend and from its summit you will gain a fine extensive prospect, embracing in great measure, the objects which you saw from Samson; but from your change of situation they are seen in a somewhat different aspect. To the North, Hangman Isle, New Grimsby Harbour, and Cromwell's Castle; towards the East, St. Martin's; and about ten leagues distant, the Land's End. In the same direction, but almost at your feet, the Abbey Grounds, and the pond of fresh water; Southward, the Eastern Isles with their pretty green slopes even to the water's edge; St. Mary's with the white sands of Crow Bar fill up the outline, and bring you once again to the Pier and to the Pool. And it is time to think of returning there; for the sun is declining towards the western wave, and the shadows of evening will soon begin to lengthen.

But you may well linger a few minutes on this charming hill. For how rich and lovely are the mellow lights which now rest upon the landscape. Look once more at Cromwell's Castle, and the clear, still pond of fresh water, stretching towards the Abbey. The repose of sunset, the softness of the air, and the clear waters, reflecting in their bosom the many tints of a summer evening sky, will all concur to heighten the interest of the scene. Descending from the hill, a good road will conduct you to the Church, near which you may re-embark for St. Mary's.

Troutbeck says "not many years ago, there were only two families on this island, but now there are eleven." "Two years since," says Woodley "there were twenty-two, and now, as appears from the enumeration of the houses, there are twenty-four, and one hundred and forty inhabitants." The population at the present time, consists of thirty families, and one hundred and nineteen inhabitants.

A careful examination of the Eastern shore of Bryher, is recommended to those, who are desirous to add to their collection of shells.

Second Excursion.

THIS day we propose to visit Tresco and the Isles between it and St. Martin's. We will land on the Southern beach of Tresco, at some point of the white sands, eastward of the Abbey. In your course thither you will pass a fine rock called The Mare, from its resemblance to the head and neck of a colossal horse. It is connected with some ledges, running out towards the North East, which are visible at low water. You will observe also, to the North East, a bold rock which wears the appearance of a crown. It forms the Southern extremity of Pentle Bay. The Northern extremity of this bay is called the Lizard point. Pentle Bay is the best place on the shores of Tresco for shells. But for the present we must defer our visit to its beautiful sands.

A good road has recently been made from the beach on which we have landed to the Abbey grounds, offering to conduct you to the margin of those large pools of fresh water, which are so singular and beautiful a feature in the

scenery of this Isle. Near them, upon an eminence, stands the Abbey. If you have received permission, and it is seldom refused, to see the gardens and the grounds, you must pass through the gate which is nearly at the end of the road, and ascend the slope which lies before you, having the Abbey on your left, and the plantations on your right hand. You thus arrive at the principal entrance to the house and gardens. Passing through the arch-way, you will be at once struck with the extent and beauty of the view, and will readily believe that the spot chosen by the Proprietor for his residence, is the best which the islands afford. From the terrace in front of the house, he commands a view of The Road and all the principal Sounds; and from the hill on which his flag-staff is placed, he sees the whole extent of his domains, North and South, East and West.

On entering the gardens you will be charmed with the gay profusion of flowers, some creeping on the ground, and others climbing the rock-work, which affords at once shelter from the winds, and inviting opportunities of display. The climate and soil are very favourable to vegetation, and as great a variety of plants and flowers is found here growing in the open air, as in any part of Great Britain. Among them we may notice the numerous tribe of Mesembrianthemums, spreading in the greatest luxuriance and beauty; Fuchsias of all kinds, Heliotropes, Crassulas, Egyptian Arams, and the graceful Clianthus. These, and many other yet more curious plants, flourish in our genial climate, requiring only shelter and protection from the violence of gales. The Geraniums and Myrtles, and sweet

ABBEY GARDENS, TRESCO.

scented Verbena, grow to the dimensions of considerable trees; and, later in the year, the gardens are adorned with handsome bunches of Chrysanthemums. In the midst of the gardens, stand the walls of the Old Abbey Church, mantled over with the evergreen Geranium. Troutbeck says "this Church is ninety feet in length, and thirty feet in breadth, and stands due East and West. In the South side wall, is a fine arch of good workmanship; and on the North side has been another arch, directly opposite to it, and of the same breadth, which is now fallen down, and only six feet in height standing. The Church appears from these two arches fronting each other, to have been built in the form of a cross. The arch that is standing on the South side, is twelve feet wide at the bottom, and runs up to a sharp point at the top, which is sixteen feet high; and on the West side of the standing arch is an arched door." So writes John Troutbeck in his work which he most truly declares to be "entertaining to all degrees of readers;" but his account of the Abbey Church is certainly inaccurate. The present Proprietor of the Isles has taken great pains to ascertain the truth and he is clearly of opinion that there never was a transept. The arch would lead to the supposition that transepts had formed part of the original design, but there is nothing whatever in the foundation or other part of the building to show that the design had been carried into effect. The stone used in the building is granite, excepting the arches, which are cased with a remarkably fine grit stone of a reddish colour, supposed to have been procured from Normandy. "The Abbey was

founded in the tenth century, and was erected by some of the Earls of Cornwall soon after the Norman conquest."* "But, so early as the time of King Henry the First, this monastery with all its appendages, was given to the Abbey of Tavistock."† The interior of the nave was used by the inhabitants as their burial place until the last thirty years, since which period the dead have been interred in the ground around the Church.

Returning from the gardens you will pursue your walk along the road which leads to the village. On the right lies one of the beautiful pools of fresh water, before mentioned, containing a large quantity of eels and tench. The two ponds cover a space of fifty acres. Straight before you is Shipman Head, which is seen to great advantage from this road. In the still calm of summer it is an object of great interest; one fold of rock, as it were, succeeding to another and gradually contracting the view by its nearer approach to the Northern side of Tresco. In the rough storms of winter its appearance is most grand; when the great waves of the Northern ocean, breaking at its base, dash their white sheets of spray over its highest ridges, and fall in foaming cascades into the waters of the harbour. As you proceed along the road, you will observe on the opposite side of the pond, a handsome group of rocks perched finely on the hill, which rises with a gentle acclivity from the margin of the water. The hills of Bryher, which you explored yesterday, soon open on your left hand, and you will recognize some of the rocks to which

* Drew. † Borlase.

Day & Son, lith^rs to the Queen

OLIVER'S CASTLE, NEW GRIMSBY HARBOUR.

your attention was then directed. The road now skirts the edge of the harbour, and leads you by a most pleasant route in the direction of Oliver Cromwell's Castle.

The group of cottages on your right is called "the Palace from a house of public entertainment formerly kept here."* The road, after you have passed these houses, is exceedingly pretty. It has been very recently formed and leads to a convenient place of landing or of embarcation in New Grimsby. The cliff rises somewhat abruptly on the right; and masses of rock, some large and some small, protrude from its green surface, and add greatly to the interest of the scene. The road does not extend the whole way to the castle; which, however, you will have no difficulty in reaching.

The tower is an excellent piece of masonry, "about one hundred and sixty feet in circumference, and sixty feet high. The walls are twelve feet thick, and raised on arches. The roof is flat and has a battery of nine-pounders with a parapet wall about six feet thick. These might be employed with great effect in case of emergency, as the situation commands the harbour in every direction. At the foot of this building is a stone platform, next the sea, having also a good parapet wall upon which some old iron guns are planted."†

Above this tower, on the top of the hill are the remains of another fort, called Charles's Castle. A small piece of the original wall is distinctly visible; and in it are one or two embrasures. Adjoining it are the ruins of a small out-

* Woodley. † Drew.

work. Near this spot about eighteen years ago an earthenware pot was discovered, together with some pieces of money.

The view from this point will at once arrest attention. Looking Southwards, how charming is the prospect of the channel between Tresco and Bryher. Hangman Isle lies immediately below. The hills of Bryher and its pretty bays are on your right; St. Agnes is seen in the distance; the Garrison and St. Mary's somewhat nearer, and many other isles and rocks, with which your eye is now familiar. This is a scene of great interest and beauty in clear, fine weather. Nor is it less so, though the interest be of a different character, in the season of storm and tempest. The high ground, on which you are now standing, might well be chosen by those who wish to see the waves lashed into fury by a storm. When the wind has for some time prevailed from the North West, the sea rolls finely in upon the rocks at the back of Shipman Head; wave after wave, literally mountain high, breaking upon the iron-bound coast, presents a scene of great magnificence and awe.

Being now at Charles's Castle, it should be mentioned, to the honour of the Isles of Scilly, that this was the last place in his dominions, which continued loyal and true to the cause of Charles the First. "The Parliament forces "says Troutbeck "under Admiral Blake and Sir George Ayscue, intent upon reducing Scilly, the last retreat of the cavaliers, took footing at first in this island of Tresco." This circumstance would seem to claim for the Scillonians some such proof of royal consideration as was

shewn by our Sovereign in the summer of 1847. From the days of Athelstan until the present time, if we except the brief sojourn of the unfortunate Charles, no British monarch ever set foot upon the land of Scilly, until the Queen, with her Royal Consort and the Prince of Wales, was pleased to visit it in her route to Scotland. Nor can we reflect, without much thankfulness to God, as the Author and Giver of all good, on the bright and happy contrast afforded by the present reign to the troublous times which immediately preceded the commonwealth. May our Queen long reign in the hearts of a free and prosperous people! May England long be the home of piety, plenty, and peace!

We will now leave this beautiful spot and bend our steps across the Downs to Piper's hole, which is at the North East point of the island. It is a work of some toil and difficulty to explore this curious cavern; and the services of two or more of the islanders must be engaged, who will provide a small boat and candles for your use. Some blue lights will also be required for the purpose of a thorough inspection of the cavern. You must be content to clamber over fragments of rock and stones for some distance; but, with the assistance of an experienced guide, you will easily surmount all obstacles. and reach a pool of fresh water, when the boat will be called in requisition. The pool varies a good deal in its length, and consequently in its depth, at the different seasons of the year. The distance across it, which may be called its length, is generally between twelve and twenty fathoms. If there are more than sixteen fathoms of water it is impossible for visiters to be ferried over it. But this is

very rarely the case in the summer months, when the water has been reduced to *even ten* fathoms. Assuming then that you have been able to cross the pool, you again land and by the aid of the candles and the blue lights gain some idea of the extent of the cave. Its inner recess is about one hundred fathoms from the entrance.

Woodley tells us that "there are two other remarkable caverns at the North end of Tresco, one of which is about twelve feet high, three feet wide, and seventy feet long." This is called by the islanders, Little Piper's Hole; and the dimensions given, are probably correct. He adds, "the other is twenty feet high, ten feet wide, and above two hundred feet long." This, from the enquiries which I have made, I am induced to think a considerably exaggerated statement. At all events, I am informed by an intelligent pilot,* who lives on Tresco, that these caverns are not worth visiting. Woodley is, however, quite right in saying, "On the North West side of the hill, and about three hundred yards from Piper's Hole, is a cavern, called The Gun, the length of which is about sixty feet, where there is a spring of fresh water called the Gun-Well, constantly running.

From Piper's hole you will have a pleasant walk along the head of Gimble Bay, called Gimble Porth by the islanders. The waves roll finely in upon the bar of sand, and break around the base of Golden Ball, Menavawr and the other rocks, which are seen from this Northern part of Tresco. From Gimble Bay you must retrace your way to the Beacon and the Town Hill, and thence to the Flag Staff, which is planted on the hill at the back of the Parsonage.

* John Ellis.

The view from the summit of this hill must not be omitted in a description of the beauties of Tresco. The larger pond of fresh water, the Abbey, the fields and the meadows; and in an opposite direction Samson and Bryher, and the waters of New Grimsby are seen to great advantage.

Returning to the road, a few paces will bring you to that part of the village called the Dolphin; "probably from an abbreviation of the name of the noble family of Godolphin, so long proprietors of these islands."* In this central spot stands the Church, a convenient and comfortable building, in the form of a cross. Near it are the Schools; the Infant School, recently erected, is about as far from the Church in the direction towards the Abbey, as the school for the elder children is in the direction of Old Grimsby, the harbour on the North Eastern side of this island.

On the high ground to the South, commanding a good view of this part of the parish, is the Parsonage. "It is pleasantly situated, although the aspect is North-North-East, and commands a view of some well cultivated fields."† The Dolphin fields are as good land as any in the island. Borlase with his usual accuracy has thus noticed them; "the soil is so very fruitful, that one field of seven acres has been in tillage every year since the remembrance of man, and carries exceeding plentiful crops."

Pursuing the road towards the harbour you will pass upon your left hand some excellent gardens, which have within the last few years been allotted by the Proprietor to some of his tenants who occupy the cottages by the road-side.

* Woodley. † Borlase.

Here the Agent for the Trinity House, who also holds other important offices, resides; and a good house is now building towards the North for the Master of the Light-Ship at the Seven Stones.* This house is most conveniently situated; for from the high ground above it he can see the vessel which is entrusted to his charge. On this island dwellings are provided for all the men connected with the Light-Ship, that they may be under the immediate superintendence of their officers.

The harbour of Old Grimsby is overhung by a cliff, fifty feet in height. Its northern extremity is Merchant's Point; and the several fragments of rock which jut out here and there are called Permellin Carn, Permellin Rock, and Merchant's Rock. On the Southern point of the harbour is the Old Blockhouse, "twenty eight feet in length and twenty two feet in breadth."† This battery, if put into an efficient state, would be a serviceable means of defence to the harbour in time of war. There is, at present, only one gun.

I must not fail to observe that the approach to this harbour from the sea is exceedingly pretty; the bay, at the head of which are the boat-house, belonging to the Coast Guard, and several cottages which give a cheerful aspect to the place, being seen to great advantage; and the rocky cliff, of which I have spoken, supplying no inappropriate back ground.

At this part of the island, the visiter should again embark at the little Pier which he will find convenient for his use, and sail in a Northerly course. The first islet which he will

* For a fuller notice of the Seven Stones, see the Fourth Excursion.
† Troutbeck.

pass is Northwithiel; and steering to the South of Golden Ball, which "is nearly joined to St. Helen's by a ridge of rocks,"* he will approach Menavawr, the finest rock in these seas. On this he must land, if it be practicable. The most accessible part of the rock is at the South West end. If he is so fortunate as to effect a landing, he will find it hard indeed, but not so difficult as at first sight appears, to mount its abrupt and precipitous sides. From the boat it seems to forbid the thought of scaling its summit, and to afford a secure and inaccessible retreat to the wild birds which here lay their eggs in great number. But there is no danger in the attempt to clamber up its rugged surface. With the help of a friendly hand you may easily reach the top, which is at the least a hundred feet above the level of the sea. The rock is distinguished by three high peaks, of which one is separated from the other two by a rift or chasm, through which at high water and in very calm weather a boat may shoot. There is, indeed, a channel between the other parts of this rock. John Ellis, the Proprietor's chief boatman, who has corrected my information upon this point, tells me, however, that he is the only man in Scilly who has ventured to take a boat through this second channel.

The more you survey this magnificent rock, the more will you admire its grand and beautiful proportions; and you will acknowledge that a visit to Menavawr is one of the chief things to be accomplished by those who wish to see the noblest scenery of the isles. When you have sufficiently explored its rugged sides and highest points you should

* Woodley.

re-embark and desire your helmsman to steer you round it. Viewed from the water on its Northern side it is peculiarly grand.

Leaving Menavawr you should sail to Round Island, where the Puffins breed; and, having examined its bold and rocky sides, sail through the gap leading into St. Helen's pool.

The island from which these waters derive their name, appears to have been formerly inhabited. Troutbeck says "There are the ruins of a church upon this island, which is the most ancient Christian building in all the islands. It consists of a South aisle twenty one feet and six inches long, by fourteen feet and three inches wide, from which two arches, low and of an uncouth style, open into a North aisle, twelve feet wide, by nineteen feet and six inches long. There are two windows in each aisle formed in the most rustic manner; and there is a stone jutting out, near the Eastern window in the North aisle like a platform, on which, it is supposed by some, the image of the saint stood to whom the church was dedicated. If this conjecture be true, the stone must have been placed there long after the Church was founded, for it is undoubtedly much older than image worship, which was not known in England till the latter end of the eighth or the beginning of the ninth century. It is probable some priests or monks used to reside near the church, for there are still the remains of houses built in the form of cloisters." In these conjectures Woodley agrees, "and from the contiguity of this island to Tresco, Teän, and St. Martin's, I presume" he says "that the

inhabitants of these places resorted to St. Helen's for public worship, before they had churches of their own. The site of St. Helen's Church was well chosen. It stood on a sloping ground, being sheltered by a long high hill from the fury of a Northern gale, and opening to St. Mary's Road (edged round, and, as it were inclosed, by islands) on the South." It is difficult to speak with any certainty as to the buildings formerly standing on this interesting isle. There is a small portion of the original wall yet remaining; but the far greater part of that now standing is evidently of very recent erection, being loosely put together without cement of any kind.

St. Helen's is now uncultivated, and the only building upon it is the Pest House, which is opened to receive patients from vessels under quarantine. Goats and deer seem to claim the island as their domain. These animals watch from the higher points of rock those who land upon their territory, and are ill at ease until they see them again retiring to their boat. But the visiter will do well to make the circuit of this isle. There are many fine masses of rock upon it. Those immediately above the Pest House principally deserve notice; but others towards the North are exceedingly bold. On the Northern side of the isle, directly opposite Round Island, there is a fine chasm in the rocks, through which the sea rushes with great force, finding for itself a channel of scarcely less than one hundred and fifty feet in length. This place it is worth while to explore. On the isle, just above the innermost recesses of the chasm, is a little chamber richly adorned with Asplenium Marinum.

Menavawr is seen to great advantage from St. Helen's; and as you walk along the North-west side of the isle, and look towards New Grimsby, the houses in that part of Tresco, with the boats and vessels riding peacefully on those calm waters, and the rocks and islets in every direction, present a scene of beauty and of interest scarcely inferior to any which the isles afford.

The opposite shores of Teän, between St. Helen's and St. Martin's, next invite your attention. For the name of this island Woodley claims a Greek origin. He calls it "Teän, properly Theon, and hence, evidently of Grecian denomination." The shape of this island is very irregular; and it has consequently several beautiful bays. "On the North side of the island I saw a chasm in the rock similar to that in White Island, but much smaller." * As the boat nears the shore, you will at once perceive that this Isle is a preserve of white rabbits; which, here coiled up like a ball of snow, and there coursing over the hill, give a charming variety to the scene. "Here" writes Mr. Woodley "are several remarkable carns. Near one of these (called Yellow Carn) are the vestiges of a Druidical circle. Great Hill is a lofty eminence of singular abruptness, especially towards the North. A high rock called Penbrose (from the Cornu-British appellation Pedn Brauze, signifying the high head land) lies about fifty yards to the North of this Island. The passage between Teän and St. Martin's is called Teän Sound. It is studded with rocks and ledges on each side, but has a good depth of water in the middle, and may be safely used by a skilful pilot."

* Woodley.

From the high ground of Teän the Light Ship at the Seven-Stones is distinctly seen in clear weather. Beyond it Eastward, the Land's End. Towards Tresco, the Harbour of Old Grimsby and St. Helen's Pool: on your left is St. Martin's; and at its Southern extremity the pretty group of the Eastern Isles. Far away to the West is St. Agnes and Annet; while nearer in the same direction lies the coast of St. Mary's, and the harbour; the Pier and the Garrison. Here is a combination of objects similar to that which you saw on Bryher, and yet so different in their relative situation that the prospect has all the charms of variety, if not of novelty.

From this Isle you may embark on your return to St. Mary's. Direct the helmsman to take the boat sufficiently near to the Hedge Rock, in your course to the Pool, to give you a good view of its form and dimensions.

Third Excursion.

We propose as the object of this excursion, St. Agnes and the Western Isles. It will depend upon the tide and other circumstances whether the tourist first explore St. Agnes and Annet on his route to the Western Isles and Rocks, or make a cruise to the Bishop and Rosevear with its cluster of isles, taking St. Agnes on his return. This latter plan will have the advantage of bringing him nearer home before the day light fails.

Starting then as early as may be, the visiter will have a pleasant sail to the Bishop. We will reserve all notice of the Garrison, St. Agnes, and Annet, until we are able to examine them more carefully. At a distance about two miles from Annet Head lies Crebawethan; and almost united with it towards the West is another islet distinguished by the name of Little Crebawethan. It was upon these rocks that the Douro was wrecked on the 28th of January, 1843, and all her crew perished.

To the North of Crebawethan, where the waves are

breaking, is the Gunner; and, yet further in the same direction, the Nundeeps, rocks which make the passage through Broad Sound hazardous to those who are inexperienced in these seas. On the 21st of November in the same year in which the Douro was lost, a Schooner from Smyrna, bound to London, struck upon the Gunner. She became a total wreck. The vessel and cargo were all lost. The crew took to their boat; and, through God's mercy, safely reached the shores of Bryher *in the night.*

There is no danger in approaching the Bishop after you have passed between Crebawethan and Round Rock which lies a little to the North West; though unless the weather is very fine and calm, it will be a matter of great difficulty and of some risk to land upon it. The intended position of the Light-House is certainly as picturesque as it is perilous and solitary.

When this work was nearly ready for the press, a great and most unexpected disaster happened, which may, in the judgment of some, seem to call for a revision and amendment of this excursion. During a very severe gale between eleven, p. m., of the fifth, and three, a. m., of the sixth of February, the Light-House was swept from the rock. It appears that the cast iron pillars on which the Light was to have been placed were broken by the combined force of the wind and the water.

I have not, however, deemed it necessary to withdraw the notice of the works which had so nearly reached completion; nor the pretty view which forms the frontispiece. Many tourists will, I have little doubt, be the more anxious to visit

a rock, to which something of a romantic interest will henceforth attach. At all events the view which is here given will contribute to preserve in remembrance the attempt which had been made, at no small cost and trouble, to afford security to vessels navigating these seas. The drawing of Lady Sophia Tower, made partly from the engraving which appeared in the Illustrated London News of November 24th, 1849, and partly from her Ladyship's own sketch, represents the Light-House exactly as it was left by Mr. Douglas in the autumn of 1849; and, consequently, "as it appeared previous to its total destruction in the terrific storm" of February. It was, in fact, completed as far as the Lanthorn, which would have formed the roof of the house designed for the Light-keepers. Since the gale the rock has been minutely examined. It is entirely sound and unshaken; no rent, nor seam, nor any flaw is discernible in it.

The following description taken from the Newspaper before alluded to, will, it has been thought, be generally read with interest. "The works are carried on by Mr. Douglas for the Honourable Corporation of Trinity House, under the superintendence of Messrs. Walker and Burges, the eminent engineers. The Light-House is formed of cast-iron columns, braced and stayed with wrought-iron rods. The columns are sunk into the rock, and the ingress to the Light is by the interior of the centre column to the hopper, over which, and under the gallery, are the living-room, store, &c.. It is upwards of 120 feet high, and twenty feet higher than the far-famed Eddystone, and is peculiarly

adapted (notwithstanding its apparent lightness) to withstand the heavy seas which fall in at that point, as from its construction the sea passes through without taking any hold in comparison as it does when meeting the solid body. It is likewise well placed, inasmuch as the light can be seen about thirty miles, thereby giving the homeward-bound vessels a good offing so as to enable them to run up the English or Bristol Channels, as circumstances may require; thus affording a great advantage over the St. Agnes Light, which, being so much nearer the main land, renders the approach in bad weather much more dangerous. The centre column is about three feet, six inches diameter, and the entrance door is about eight feet above the levelled part of the rock. The view, here given, is taken at low water, and at high water the rock is covered to within two feet of the foot of the centre column. The rock is situated about eight or ten miles Westward of the Land's End." The last sentence in this account, it is unnecessary to inform those who are acquainted with the geography of the Isles, is obviously incorrect. The Bishop is about thirty two miles from the Land's End, and lies West South West from it.

At a distance of one mile and a half from the Bishop, in a Northerly direction, are the Crim Rocks. They lie a very little more to the West; and it is to be hoped, that if ever a Light is placed upon the Bishop, it will give sufficient notice of the presence of danger, to secure vessels coming in that direction from striking upon them. Several have, it is well known, been wrecked upon these out-lying rocks; and the boon therefore, will be the greater, of having a warning

Light placed as near to them as possible.

From the Bishop you must direct your boat towards Rosevear; noting as you sail along, the ledges and shoals and rocks which abound in these seas, and which have made the Isles of Scilly an object of so great terror. When you survey the network of rocks by which you are surrounded, and remember that there are many, partially or altogether hidden from view, which would prove fatal to any vessel driven on them, you will not wonder at the dread which so universally prevails, and the anxiety of all seamen to give Scilly a wide berth. Your best course will be to sail Eastwards to Crebawethan, so far returning in the track you came. The swell of the Western sea makes it difficult and hazardous to sail towards the South of Rosevear from the Bishop. As soon as you have passed Crebawethan, you must steer South-South East. You will soon see Jacky's Rock, memorable for the wreck of "The Thames" Steamer, on the morning of the fourth of January, 1841, when on her passage from Dublin to London. The weather at the time was most unfavourable to any attempt to render assistance. When the calamity was discovered by the pilots on St. Agnes, the wind was blowing North West to North-North-East, with heavy storms of hail and rain mingled with snow. It was, therefore, impossible to afford any effectual aid; and out of sixty-five persons only four were saved. Such recollections give a strange and melancholy interest to the scene around you, and suggest reflections which no thoughtful mind would desire to banish. The records kept at the Light-House on St. Agnes, to which

I have had access through the kindness of the Agent for the Trinity House, preserve the remembrance of other shipwrecks on these dangerous rocks, not perhaps so awfully fatal but accompanied with great loss of life; while many, oh! how many, of whom we have never heard, have through ignorance or carelessness "sunk as lead in the mighty waters." We hail with joy and gratitude every well-considered attempt to make this navigation more safe; and the very rocks are eloquent in bidding us to live as we would wish to die, in urging us to "prepare to meet our God."

The long reef of rocks at your side is called "The Ponds." Rosevear is still to the South, separated from The Ponds by a channel called Santaspery Neck. Upon a rock close by this Neck, a schooner belonging to Plymouth and laden with wheat, struck on the 27th of March, 1849. She became a total wreck; but the crew were happily saved and brought on shore by some of the intrepid inhabitants of St. Agnes. From Rosevear you will be glad to survey at leisure the isles and rocks in the midst of which it stands. On it were erected the temporary dwellings of the workmen engaged in building the Light-House on the Bishop, which are still standing. You will be repaid for the trouble of walking and scrambling over Rosevear by a nearer view of the masses of rock which lie around you, and which the waters of the great western ocean are continually chafing.

The Dutch barque, "Nubicto," on her passage from Batavia to Rotterdam, struck upon one of the sunken rocks to the South West of Rosevear, on the 21st of February, 1844. She was totally wrecked; and two only of the crew

escaped. Their preservation was remarkable. They contrived to reach Rosevear, where they passed many hours in a state of fearful anxiety and suspense. The weather was very thick and hazy; and their signals of distress were unnoticed. Providentially, on the following day they were discovered, and released from their dismal situation. It is but right to add, that their melancholy case awakened the sympathies of the Islanders, and elicited substantial acts of kindness, which the gratitude of the sufferers well repaid.

Close to Rosevear towards the South, is Rosevean, and at some little distance South West, the Gilstone, on which Sir Cloudesley Shovel was wrecked on the 22nd of October, 1707. "Returning from Toulon in company with many other ships of war, in which were several distinguished personages, he came into soundings on the morning of the 22nd of October, 1707, and found his ship in nineteen fathoms of water. The weather at this time was thick and foggy, and the wind blowing strong; which, with the supposition that they were nearing the land, induced him to make signal for the fleet to lay to. At six in the evening the admiral made sail again, and was followed by the rest of his fleet. This had scarcely been done before he hoisted signals of danger, which were repeated by several other ships, as a warning to those at a distance to keep off to sea. Sir George Byng, in the Royal Anne, who was at this time about half a mile to windward of him, saw the breakers, and soon afterwards the rocks. His safety depended on the energies of a moment; for so near was his ship to a dangerous rock called the Trenemer, as to have it under his main chains,

and as the ship passed, it knocked off the larboard quarter gallery, but happily he escaped without sustaining any further mischief.

"About eight o'clock at night, the admiral's ship, the Association, struck upon the Gilstone with so much violence, that in about two minutes the vessel went down, and every soul on board, but one, perished. This man saved himself on a piece of timber, which floated to a rock called the Hellweathers, where he was compelled to remain some days, before he could receive any assistance. Besides the Association, the Eagle of 70 guns, Capt. Hancock, and the Romney of 50 guns, Capt. Cory, perished with all their crews. The Firebrand fire-ship was also lost, but Capt. Percy who commanded her, and most of his men were saved. The Phœnix fireship, Capt. Hansom, ran on shore, but was afterwards got off. The St. George, commanded by Lord Dursley, seems to have escaped miraculously. She struck on the same rocks with the admiral, but the very same wave that beat out the lights of the Association, lifted the St. George from the rocks, and set her afloat again.

"Besides the admiral, there perished on this occasion, Capt. Lodes of the Association, Sir John Narborough and his brother James, sons of Lady Shovel by a former husband; Mr. Trelawney, eldest son to the Bishop of Winchester, and about 2000 men." *

When you have sufficiently explored these Western Rocks, reposing now so tranquilly on the surface of the deep, but in the winter wild of storm and tempest so full of threatening

* Drew.

and dismay to the fearful mariner, you must direct your course towards Annet. The isle to the East of Rosevean is Gorregan, and between the two, are high rocks called the Rags. A single rock lies within Gorregan, named the Biggal. North East from Gorregan is Meledgan;* and between this and Annet, are an almost countless multitude of rocks, which may well make you anxious to engage the services of a trusty pilot, who from his boyhood has been conversant with these perilous waters.

Sailing by the reef of rocks called Hellwethers, and landing on the South East point of Annet, you should direct your steps towards the North Western extremity of the isle, called Annet Head. Here the rocks are of a fine, picturesque character; and you will be the more pleased to examine them, as they form so prominent a feature in the view from the other isles.

In the histories of Troutbeck and Woodley, mention is made of a "singular chasm" in the North East extremity of Annet, called Lake Anthown, which the tourist will not therefore wish to pass unnoticed. Woodley describes it as "about forty yards long, from three to four wide, and seven deep as far as has been traced." Troutbeck speaks of it as "about forty yards long, near ten feet wide, and about

* To give the reader some idea of the dangers caused to navigation by the presence of these rocks, I have mentioned two or three vessels, which are known to have been wrecked upon them. On the 11th of February, 1842, such a calamity happened on or near Meledgan. At daylight the top-gallant mast of a brig appeared above water, a little inside this Isle. She proved to be the "William Proben," of South Shields, laden with wheat, and it is supposed that she struck on one of the Southernmost rocks. No exact information could be gained on this subject, as, alas! all the crew perished.

twenty feet deep." He adds that it "is supposed to have been an old iron mine, because the rocks here have the appearance of iron ore." The visiter, who expects from this description to see anything remarkable at this place, will be disappointed. There is, certainly, no sufficient evidence that it was ever worked as a mine. Annet is not inhabited. It contains about forty acres, which afford some tolerable pasturage for a few head of cattle. From this island you will gain a closer view of the Great Smith, a remarkably fine rock, lifting as it were its head out of the deep waters. It is especially bold on the Western side, and serves as a mark for different places, chiefly perhaps for the North-West passage of the Broad Sound. That rock to the South-East is the Little Smith.

From Annet the distance is but short across Smith's Sound to St. Agnes. You will land at Priglis Bay, near the Church, which, as I conceive has given its name to the bay. It is not unlikely, that Priglis is derived from Port Eglise, or Portus Ecclesiæ; and in more senses surely than one is the name appropriate. Not a few, who have been wrecked upon the rocks which you have been exploring, and whose bodies have been afterwards recovered, lie in this humble church yard; and many, we may hope, have visited the church, to present their offerings of praise to Him, who has preserved their life from destruction, in the midst of the foaming billows.

Troutbeck and Woodley call this rocky inlet Pericles Bay, and the latter adds "this denomination of itself, would go far to settle the point of the original commerce of the Island. At present however, this bay is generally known by the name

of Porth Nicholas, or the still more barbarous, though not equally distant, corruption of Prigless." In the map the more elegant, and I have no doubt the more correct designation Priglis is adopted; and by this name I have always heard the bay called. In the fields behind this bay some urns or pots have, in digging the earth, been discovered.

In Drew's history of Cornwall there is a singular account of the origin of this church, which deserves to be mentioned. "In the year 1685" he says "a French Vessel struck upon the rocks, and being found without any one on board by the inhabitants of St. Agnes who repaired immediately to her assistance, she was taken possession of, and with some exertion conducted to St. Mary's Here she was claimed by the captain, who with the rest of his crew had safely arrived thither in their boats. For saving this vessel the islanders received a considerable sum, and being at that time without any place of worship they agreed, with a unanimity that did honour to their piety, to appropriate the money to the building of a church, which was accordingly done." The present church is of very recent date, having been built rather more than forty years. The church, which stood previously at the North West corner of the burial ground, was of much smaller extent; and that, in which divine service was at a yet earlier period performed, was built on the site of the cottages which are on the South West side of the church yard.

Keeping at the back of the church and near the sea, you will be able to make your way with little difficulty round this part of the island. The rocks which form the

cliff are very picturesque and beautiful. As you approach Camberdril point you will be struck with their size and peculiar character. Different in this respect from most of the groups in Scilly, they shoot up into sharp points; and as you can approach them on all sides they seem to invite a minute and careful examination.

The high carn which next presents itself is Castlebean; and from it you will quickly reach St. Warna Bay, of which the legend is, that it derives its name from a saint who landed at this spot from Ireland. "The ancient inhabitants of this island," says Troutbeck, "used to invoke St. Warna as their benefactress in times of distress, whom they supposed to be instrumental in sending wrecks and in directing and presiding over their good fortune. St. Warna's Well is now filled up, lest the cattle or sheep should push one another into it when they came to drink." !! This account there is every reason to believe, is purely fabulous. The famed well is now at least a mere hole; and it admits of a question, notwithstanding this tradition, whether it was ever any thing else.

Near this bay upon somewhat higher ground is a curious rock, called the Nag's Head. Pursuing your way at this Southern side of St. Agnes you will pass in succession fine promontories of rock jutting out into the sea, and warm, sunny coves or bays. Each of these beautiful carns, which gird the island, has its particular designation: but it would be wearisome and useless to enquire names, forgotten as soon as heard. Many of them are given in the map from which the orthography of names and places in this book is

taken. You must not fail, however, to see the Punch Bowl, a curious rock on the Wingletang Downs, to the South East of the Light House. This rock Woodley supposes to be the Logan-stone on St. Agnes described by Borlase; and of which he says that "its oscillatory powers might probably be easily restored." The reader may be pleased to have an opportunity of reading the passage from Borlase's Antiquities of Cornwall which refers to this rock.

"There is a very remarkable Stone of this kind on the Island of St. Agnes in Scilly. The under rock is ten foot six high, 47 feet in circumference round the middle, and touches the ground with no more than half its base. The upper Rock rests on one point only, so nice, that two or three men, with a Pole, can move it; it is eight feet six high, and 47 in girt. On the top is a large Basin, three feet 11 in diameter, (at a medium) at the brim wider, and three foot deep: by the globular shape of this upper Stone, I guess that it has been rounded by art at least, if it was not plac'd on the hollow surface of the rock it rests upon by human force, which to me appears not unlikely."

The deep bay on the Southern side of St. Agnes, whose waters at spring tides mingle with those of the Western Ocean flowing into Perconger, over the bar of sand which separates the Gugh from the main land of St. Agnes, is called the Cove. It affords a most happy and convenient place for the islanders to obtain supplies of fish.

The inhabitants of the different Isles (with the exception of those on St. Martin's and Tresco, who draw their nets elsewhere) haul the cove, as the phrase is, in turn; and it

usually falls to the lot of each isle to haul twice in the course of the season. Not unfrequently a very large quantity of fish, between eighty and one hundred and forty baskets is secured in a single night, each basket containing, on an average, three hundred fish. The store, thus gathered from the deep, forms a main article of provisions for the winter.

Crossing the bar of sand the tourist should find time for a walk on the Gugh. Borlase tells us that the Gugh is "a part of Agnes, and never divided from it, but by high and boisterous tides." This statement is not, now at least, entirely correct. The Gugh is always an island at spring tides, when there is a depth of water on the bar, sufficient for a boat to shoot across it.

Sentinel at the North-West of the Gugh stands the Kittern, a fine picturesque rock, well worthy of notice. At the distance of about a quarter of a mile East by South of the Kittern is the Bow. The South Eastern point of land is called on the chart Dropnose Point, from a rock which bears that name at a small distance from the shore; and near to this, Eastwards, is another with equal propriety called Wetnose.

There are several barrows upon the Gugh. At the North West extremity the visiter will see one between thirteen and fourteen feet long, four feet broad and between two and three feet high. This lies on nearly the highest point of that part of the Gugh, just at the back, so to speak, of the Kittern.

Two more of these burial places may be discovered on the highest points of land towards the South East. They are not so large as the former; nor have they so distinctly the

STAR CASTLE AND HUGH TOWN, ST MARYS.

marks of tombs, being nearly filled with soil and rubbish.

Still further in the same direction are two other barrows; one in that heap of rocks which is called The Works. The origin of this name I cannot definitely ascertain. In the opinion of some it is derived from fortifications which, it has been said, once stood here; but the judgment of practical men is against this supposition, as it seems impossible they could have been used for artillery.

The other barrow lies on the high ground between The Works and the South West extremity of the Gugh. The latter is clearly seen from The Works and is not at a greater distance from them than fifty or sixty yards. This the more Southern barrow is between fourteen and fifteen feet in length, four feet six inches in breadth, and one foot six inches in depth. This barrow has four top or covering stones. Nearly in the centre of the Gugh is one of those pillar-stones of which I have taken more especial notice in the Sixth Excursion and in the Supplemental Chapter. This stone, which is called by the Islanders 'the old man cutting turf' is nine feet in length and seven feet in girth. Unlike in this respect to those on St. Mary's, which stand quite erect, its inclination is so great that the top of it is not more than six feet and a half in perpendicular height from the ground. For whatever purpose it may have been originally placed, it is now used as a mark by the pilots for bringing vessels safely into The Road or Harbour, free of the Spanish ledges, a dangerous reef at the South Eastern entrance of St. Mary's Sound.

By this time the day will be well nigh spent, and the

visiter will scarcely reach his boat, which has been brought round from Priglis to Perconger, before the sun sinks below the horizon. If, however, the cove is to be hauled at dark, he may be induced to prolong his stay at St. Agnes until midnight; and the hour or two, which will elapse before the nets are drawn, may be well employed in a visit to the Light-House. It is a revolving light: and the bright silver reflectors, the excellent order and the careful superintendence of the whole establishment; the abundant supplies of all that is necessary to ensure a steady, equable light, give proof of the zeal and liberality with which the Trinity brethren have discharged the important duties confided to their trust. From the top of the Light House, as you may imagine, you would have in the day light a far extending view of this striking panorama.

When the hour fixed for hauling has arrived, you must take up your position on the bar of sand which you crossed to visit the Gugh. The net, which had been spread at the further extremity of the cove is gradually drawn to the shore, and its contents will be deposited upon the sand. The scene is altogether striking. The multitude of fishes bounding on the ground, the dimly burning lanthorns moving here and there, the darkness of the night, for the moon has not yet risen; the soft murmur of the waters and the noisy splashing of the fish, concur to make this midnight excursion novel and interesting. The fish taken are principally scads; though not unfrequently you may be fortunate enough to get some red mullet, a salmon peel or other choice fish.

The population of St. Agnes consists of fifty four families, comprising two hundred and sixty individuals. Of them not fewer than fifty are generally absent at sea.

Fourth Excursion.

It is proposed in to-day's excursion to explore the Eastern Isles and St. Martin's. Sailing from the pier in a Northerly course the first point which invites the tourist's attention is Carn Morval, forming the North-East boundary of St. Mary's Pool or Harbour. This fine, bold mass of rocks is, perhaps, seen to greatest advantage from the water; though, when an opportunity offers of examining it more leisurely on the land, the visiter will be well repaid for the trouble. Troutbeck says that "on the East and South sides of Carn Morval are the remains of some old batteries." Of these, however, there is at present no trace.

When we have passed this point there is not much which calls for notice on the Northern coast of St. Mary's. The low reef of rocks which obliges the boat to keep at some distance from the shore is called the Creeb; and the South Western point of Pendrathen Bay which we presently reach is Bant's Carn. Thence sailing by the Crow Rock, we must shape our course in an Easterly direction across the Sound.

The first appearance of this Eastern group of isles is very pleasing. Their peculiar beauty has elicited the admiration of all who would describe the scenery of the islands. "These Islets and Rocks" says Borlase, "edge this Sound in an extremely pretty, and very different manner from any thing I had seen before. The sides of these little Islands continue their greenness to the brim of the water, where they are either surrounded by rocks of different shapes, which start up here and there as you advance, like so many enchanted castles, or by a verge of sand of the brightest colour. The sea, having eaten away passages between these hillocks, forms several pretty pools and lakes, and the crags which kept their stations, look so broken, intercepted, and so numerous, that the whole seemed but one large grotesque piece of rock-work."

The most convenient landing on Little Ganinick, the more Southerly of the two islets which lie to the Westward of this "little archipelago" * is upon the Eastern side. This island, which contains between three and four acres, is at low water connected with Great Ganinick by a reef of rocks, so that you may easily pass from the one to the other; but at high water there is between these isles a channel, seven feet, if not more, in depth. If, therefore, you wish to visit both, you will probably be obliged to have recourse to your boat. In that case you will find a suitable place for landing at the North East end of Great Ganinick, the area of which is about five acres. There is not however, except in the view which it offers of the adjoining islands, anything to repay

* Woodley.

you for your trouble. The isles are covered with long thick grass.

Little Arthur, which with Great Arthur contains from fifteen to twenty acres, next invites the visiter's attention. There is a convenient landing between the two, in a bay of sand. These isles may be properly considered as one; for it is only at high tides that the water washes over the stones which separate Great from Little Arthur; and at these times the waves flow also over the ridge of rocks which unites the Northern to the Southern extremity of Great Arthur: so that, in fact, this isle is at very high tides broken up into three islets, called Great, Middle, and Little Arthur.

In Woodley's history we read, "On a very commanding eminence on Great Arthur, is a cromlech and sepulchral cave, in very good order. The walls of this cave consist of large flat stones, laid with their edges smooth; and there are two very large stones laid flat at the head of the grave, which appears to have been opened. It is about twelve feet long, four feet deep, and five feet and a half wide; and is surrounded by an artificial mound, about forty yards in circumference. At a little distance are two other barrows." On this isle are to be seen "the remains of ancient hedges and other vestiges of cultivation."

"Little Arthur has also three ancient burial places, one of which is large and square, like a family vault." If a visiter takes the pains to compare this account with his own observations, he will find it substantially correct. The barrow on the Eastern eminence of Great Arthur, is a very large burial place; and the proportions here given are, I

doubt not, accurate. Immediately on landing at that part of the isle which is commonly called Middle Arthur, the ruins of a barrow are evident, with four covering stones. Near it is another, with only the head and foot stone. Besides these, as Woodley intimates, several others may be more or less distinctly traced.

There are also, the ruins of two small houses, which were the temporary accommodations of parties who resorted to this convenient place for the purpose of burning Kelp.

At the North East side of Little Arthur, is a large flat rock, called Arthur's Table.

On Little Ganilly, which comprises about six acres, the visiter may land at either end, according to the wind.

He will next reach an islet of singular shape, the surface of which is very rough and uneven; whence its name of Ragged Island. It contains perhaps an acre and a half.

The appearance of Great Ganilly, to which he should then direct his boat, is very pleasing. Its highest ground cannot be less than one hundred feet above the sea, being pretty nearly on a level with the highest point of St. Helen's, which lies between St. Martin's and Tresco. This is the largest of these Eastern Isles, containing not less than sixteen acres; according to Woodley, twenty. The best place for landing is on the West side, towards the Southern end of it. From the higher points of land the visiter will have, if the day be fine, a very good view of the "Seven Stones," which he will at once discover by the line of white foam, caused by the breaking of the sea upon these rocks. The Reef so called lies somewhat less than three leagues from the Islands. It

extends about one mile from North-North-West to South-South-East, and is perhaps the same distance in breadth. "These rocks can hardly be said to belong to, or to constitute a part of Scilly, yet they are frequently visited by the Islanders, on account of the quantities of large fish which abound near them." * The two points of rock at the extremities of this dangerous reef, shewing themselves at half-tide only, are the Pollard to the North and the South Stone. In the Pollard two rings have been fixed, for the use of those who may wish to land upon the rock.

The Light Ship was moored in August, 1841, about two miles to the East of the Seven Stones; and she at present rides in very nearly this position.

We will next visit Menewethan which lies to the South West of Great Ganilly; and if you are disposed for a good scramble you may land on its Western side; but the best view, perhaps, of this fine mass of rocks is from the water. This Island contains from four to five acres, and its highest point is eighty-seven feet above mean water.

The Isles to the North of Menewethan are Great Inisvouls, and Little Inisvouls. The larger of these contains about two acres, the smaller, one; and at low water the two are united.

Between these Isles the Inhabitants of St. Martin's and of Tresco haul for their winter stock of fish. They shoot out five coils of line, each containing twenty fathoms, in an Easterly direction towards Hanjague; and having drawn the seine to the shore they "tuck up" the fish into their boats, and return homewards, where they divide their spoil.

* Woodley.

You may pass from Great Inisvouls to Great Ganilly over an isthmus of rock, when the tide has ebbed four hours; and from this islet you will have a pleasant sail to Hanjague, which from its conical shape, is commonly called the Sugar Loaf. If the sea is quite calm, you may land on that side of this bold rock, where the water is smoothest; though this can rarely be accomplished. You will, however, be glad to have as close a view as possible of a rock, which is so conspicuous a feature in the scene; and to which, perhaps, your attention was first drawn as you approached the Islands. Hanjague is eighty-three feet in height, and the water around it is twenty-five fathoms deep.

Between Inisvouls and Hanjague we pass the Mouls, "which always presents three pointed rocks considerably above the surface of the water;"* and is not, therefore, dangerous. From Hanjague the visiter should sail to Nornor. The origin of this name is easily discovered; as Nornor lies most to the North of all this Eastern group, with the exception of Hanjague. Nornor is distinguished by three points of rock, of which the Western is the highest; and contains about three acres. The easiest place for landing is on the Southern side; though it will, of course, occur to the reader that in attempting to land on this or any other Isle exposed to the swell of the ocean, care must be taken to choose the side of the Isle or Rock most sheltered from the wind. If the wind is Southerly you must try the Northern side; if the wind blows from the North you must make your approach from the South.

* Woodley.

From Nornor we will direct our course to St. Martin's, a long island, correctly described by Troutbeck as "about two miles long and about six miles round, a narrow ridge of high land." It is narrower in the middle than at its extremities, but its average breadth is three quarters of a mile."* Troutbeck says "It seems to have been entirely cultivated in former times; as the tracks of hedges may be seen crossing the ridge and descending to the sea on either hand, but it is now improper for cultivation, being in many places overrun with sand and the soil quite buried." In this opinion Woodley coincides, and few persons will, I think, be inclined to differ from them. It is, however, difficult to reconcile this statement with that made by Troutbeck in the very next sentence. Speaking of this isle he says, "about one hundred and sixty years ago it had not one inhabitant;" and again, at the close of his account of St. Martin's, "about a century ago there were not above three or four families upon this island." There is, however, much in the appearance of this and the other islands to strengthen the opinion, that in ages long since past, this part of England was populous and cultivated. By whom and in what age this and the other Isles were at first peopled, and from what causes that population became extinct: whether the present inhabitants of St. Martin's are the descendants of those whom Mr. Thomas Ekins, "the first steward that resided upon the islands, since they were granted to the Godolphin family" and who "encouraged people to settle here to cultivate the land:" † These are questions which more properly belong

* Woodley. † Troutbeck.

to the antiquarian, and will scarcely engage the attention of the tourist. "There are at present" Troutbeck writes, that is, during his chaplaincy, "upwards of thirty families and about one hundred and eighty inhabitants, who are all related to each other." Speaking of his own period of residence Woodley says "At present there are more than fifty families on the island;" and in another place, "It contains sixty houses and two hundred and eighty inhabitants." Its present population consists of fifty one families comprising two hundred and ten individuals.

Woodley confirms the statement made by Troutbeck that St. Martin's "affords good pasture as well as plentiful crops of corn and potatoes." The opinion which I have heard generally expressed by the residents on this isle, is, that the pasturage is tolerably good; though, as the ground is but shallow and the bottom rocky, St. Martin's suffers much from drought. In its reputation for potatoes it still, I think, holds the pre-eminence; but the soil of all the islands is most favourable to the cultivation of this vegetable.

The inhabitants reside in three portions of the isle, severally called Higher, Middle, and Lower Town. Of these Higher Town is in every respect the most considerable.

Its site is more eligible than that of the other two, as it is built on the high ground at the Southern extremity. The Church, of which Troutbeck gives a curious and minute account, stands a little to the North of the principal houses in Higher Town. "There is no account" he says "when this church was originally built. The dead have been interred in its cemetery some centuries ago, as appears from

the plenty of bones found when graves are digged."

It is greatly to be regretted that there are no means of placing a clergyman on this isle; and consequently the church can be opened for divine service, only during the summer months; and then very occasionally. To a stranger, unacquainted with the peculiar wants of the Isles, it would seem that three clergymen, the present number, are abundantly sufficient for the work of the ministry among a population which does not reach three thousand. But a very little experience of these seas affords convincing proof that the only Isles which can be effectually superintended by one pastor are Tresco and Bryher. For each of the other three churches a clergyman is absolutely necessary, if the offices of divine service are to be regularly performed in them. St. Agnes must from its position be a sole charge; and St. Martin's can be visited by the chaplain, only in fair weather. The funds available for such purposes are inadequate for the maintenance of a fourth minister, who should have St. Martin's as his especial care; nor dare we look for assistance from other sources, so long as the demand for succour from far more populous places is still unsupplied.

On this, as on the three other principal islands, there is an Infant School as well as one for the elder children.

We will now enter upon an examination of the principal points of interest in this isle. The visiter should land in Perpitch Bay, to the West of Carniweathers. Directing his course to the higher ground on which the houses are built, he will find a very pleasant walk along the Eastern extremity of the isle to the Day-mark. This walk is the more inviting

from the distinct view which it affords of the pretty isles you have just explored.

The fine, bold, precipitous mass of rock at the most Northerly point of the East end of St. Martin's is according to the calculations which have recently been made, about one hundred and sixty feet in height, as Woodley also has computed. On the summit of this rocky headland is the Day-mark; which, according to Troutbeck, is forty feet in height; according to Woodley, twenty. The mean, probably, between these two extremes would be more exact. It is somewhat above thirty feet high; and, as perhaps you observed on your first approach to the islands, "is visible at a distance of many leagues." During the last war a house was built near the Day-mark, for the use of the officer who had charge of the telegraph erected on this spot. When peace was proclaimed this house was to a great extent demolished by the islanders; not, so far as I can learn, by any competent authority; but, forsooth, in the exuberance of their joy, or from the selfish motive of turning its materials to more profitable account.

Of the use and benefit of this signal station, some interesting records are furnished by the older inhabitants of the Isles. On one occasion, I have been informed, a boat belonging to St. Mary's put off to a vessel, with the intention of offering some fresh fish for sale. She proved to be a French ship; and, according to the rules of war, the English boat was sunk, though the crew were received on board the enemy. Presently a signal was observed at St. Martin's head, which informed Captain Pellew that a French

vessel was in sight. He immediately gave chase and brought her to action between the Isles and the Lizard. After a very destructive engagement, the Frenchman was captured, and the Islanders who had been sent below during the fight, were released. The ship was taken prisoner to Plymouth. In other instances, not a few, the communications made by the officer, on duty at this station, proved the means of safety to our merchantmen and ships of war.

The top of the Day-mark is one hundred and ninety feet; and hence, this head-land is about one hundred and sixty feet above mean water.

The description given by Borlase of the Day-mark and and of St. Martin's generally is, perhaps of sufficient interest to warrant me in transcribing it.

"At the Eastern end is a very rocky and high promontory called St. Martin's Head, on the top of which the late Mr. Ekines, a considerable merchant of these Islands built a round Tower twenty feet high, and a Spire on the top of it as many feet more, and plaistered it with Lime on the outside, that it may be a Day-mark to Ships which fall in with this dangerous Coast. The Tower is not solid, but hollow, and over the door is T E,* 1683. There is a stone-stair-case within, by which people may ascend to the top of the Tower, whence you have a larger ken than from below, and a fair view of England. The Church here is larger and better seated than that of any of the off-islands.

"This Island is a narrow ridge of land, and though fully

* "The Initial Letters of Thomas Ekines."

cultivated formerly, had not one inhabitant upon it about eighty years since, when Mr. Ekines above-mentioned, observing some parts improveable, encouraged a little Colony to settle here, and now it has the finest pasture, which we saw in all the Islands, produces good Corn, and has betwixt sixty and seventy inhabitants. There are eighteen families, all related, have a great opinion of their own Island, are not willing to admit strangers among them, and think they cannot live any where so pleasantly and plentifully as in St. Martin's: Some of them for want of arable land at home, rent lands in St. Mary's, or some other Island, and live part of the year there, the more fully to employ themselves, but as soon as their Crop is got in, and the business of their little Farm is over, they return to St. Martin's with pleasure, and look upon that as their home."

Hanjague is due South East from the Day-mark. The two Chapel rocks and Hardlewis rocks lie East, and East-South-East from the same point. They are not visible until half-tide.

We will now begin our survey of the coast. Stretching to the West of St. Martin's Head is a deep bay, called Bread and Cheese Cove. The Eastern side of this cove is Chapel Brow; and the ridge of rocks running from the high ground to the sea is very bold and picturesque. Loop-hole Point is the name given by the islanders to the Western end of this cove; and the next bay is called Stony Porth. The promontory which forms the Western side of Stony Porth is Burnt Hill; a name probably derived from the appearance of the ground. The outer extremity of this

head-land is at high spring tides separated from the main land of St. Martin's and bears the name of Rat Island. Opposite Burnt Hill towards the North "is a large rock called the Murr from a sea-bird of that name by which it is frequented." * This may have been the case in Mr. Woodley's time; but I cannot learn that it ever was, and most certainly it is not now frequented by this or by any other sea-bird.

A little to the West is Culver Hole of which both Troutbeck and Woodley give a precise account. There is however no evidence of its having been a "tin-work" or any thing but a natural excavation; and the curious arch at the entrance of the hole or cavern, which will probably be swept away, ere long, by the encroaching tide, was, there can be little doubt, formed by the falling away of the earth around it. At the distance of only a few yards to the West is another recess in the cliff of very similar appearance to Culver Hole.

The head-land lying still more to the West is called "Turfy Hill." † The origin of this name, it is probable, may be found in the quantity of turf which has been cut in this part of the island.

Bull's Porth, above which are some fine rocks; is the name given to the bay between Burnt Hill and Turfy Hill. The rocks which lie off this part of the isle, at some little distance in the sea, make it very dangerous to approach. To the West-North-West of Murr Rock is Sandy's ledge, Mackerel Rock and Merrick Ledge.

From Turfy Hill the bay, which bears the name of the

* Woodley. † Troutbeck.

island, stretches to the North West. St. Martin's Bay is half a mile in length, and is crowned by good sands. On the Eastern side of it are three mounds of earth, of considerable size, which are called by the inhabitants the Frenchmen's Graves: a name probably derived from the wreck upon these rocks of some vessel belonging to France. The bodies, it is not unlikely, of the crew were deposited in these sands. Forming the Western side of this bay, and nearly the extreme point to the North of St. Martin's "is a high carn, called Top Rock, which was split with thunder on November 20th, 1751."

So at least says Troutbeck who gives a full and marvellous account of this disaster.

Due North of this Carn is White Island to which the visiter may pass on foot at low water. This Isle contains by estimation fifty acres, * and is chiefly remarkable for a deep cavern situated nearly in the middle of its eastern side. Into this cavern it is possible to enter only at low tides; and those who have examined it, say you can penetrate twenty or thirty fathoms without reaching the end of it. It is supposed to have been an old tin-work, its direction is East and West."† There is a rock on the surface of the ground, which, in the opinion of some of the Islanders, marks the extreme distance to which you can go under the ground.

Woodley's description of this cavern represents it as a place of gloom and terror: "the rocks within—above—around—all black as night;" with much more to the same effect, which (to borrow his own expression) "surpasses

* Troutbeck who is copied by Woodley. † Troutbeck.

hyperbole." Off the North Western end of St. Martin's and due West of White Island is Pernagic Isle, to which as well as to Plumb Isle, lying to the South and nearer St. Martin's, you can walk dry-shod, when the tide has ebbed two hours. Pernagic Isle is not far distant from the Lion Rock, which, at low tides, you may also reach on foot.

On the dangerous brow of rocks which connects Lion Rock with Pernagic Isle, a vessel called the "Palinurus" was wrecked on the 27th of December, 1848. Seventeen bodies were recovered; and on the thirtieth, twelve were together buried in the church yard of St. Mary's. Two were subsequently interred near the same spot; and the other three lie in the church yard of St. Martin's. The vessel was bound from Demerara to England; and must, therefore, from some cause or other have lost her proper course; a circumstance which adds to the solemn and melancholy reflections awakened by this deplorable event. None survived to give any explanation, or to tell who and how many had perished.

To the West South West of Lion Rock is Black Rock, between which and Round Island is the Channel for Vessels sailing into Old Grimsby Harbour.

The name given by the islanders to the cove between Pernagic Point and Tinkler's Point, is Pursile Bay. This latter is nearly the most Western promontory of St. Martin's; and on it is a rock which bears the same name as the point, and "which from the singularity of its appearance, is supposed to have been an object of Druid worship. Near this are two circles of erect stones, (about sixty feet, each

circle, in circumference,) and an ancient burrow." * A visiter will have some difficulty in making out these circles, as "some of the stones have been lately taken away for building houses near at hand.". †

To the South-by-West is a small hole in the cliff which gives its name to Goat's Point; and "close to the shore, opposite the island of Teän, is a large heap of rocks, upwards of one hundred feet high, called Bab's Carn, from a family of that name, who lived close by it." † This carn still retains its name, but the visiter will see that Troutbeck has somewhat exaggerated its height.

From this point we will direct our course Eastwards, along the good road, which has been recently made, connecting the Eastern and Western extremities of this island, and which may not inappropriately be called "the mall" of St. Martins.

There is not anything which calls for particular observation in this pleasant walk.

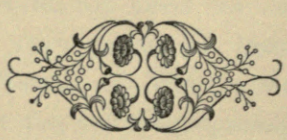
The prospect from the South Eastern end of the road, in front of the houses, is very beautiful. The cultivated fields sloping towards the sea, present either from above or from below a pleasing appearance of fertility. Cruthers Bay, or, as it is marked in the map, Higher Town Bay, with its watch house, and the pilot boats riding at anchor in its calm waters; Cruthers Hill on your right, stretching out into the sea and forming the South Western point of the Bay, which is bounded on the East by English Point Carn; these several features in the scenery combined with the more

* Woodley. † Troutbeck.

distant objects, which you will now recognize as familiar friends, present a view of great interest and beauty. Both Troutbeck and Woodley greatly overstate the height of Cruthers Hill, which is, probably, not more than sixty feet.

The beach on the Western and Southern sides of St. Martin's has so very gradual a slope from the shore, that at low water it is not possible to reach the island even in small boats. These sands, called St. Martin's flats, are one of the chief places in the Isles for the collectors of shells, especially towards their Southern end, between Guthers Isle and Higher Town.*

* For much of the information given in this excursion, I am indebted to Stephen Woodcock, and James Bickford, of Higher Town, both civil and intelligent guides.



Fifth Excursion.

The principal Isle yet remains to be explored; and two days will scarcely be sufficient for this purpose. Not only is St. Mary's the largest of the group: but it is the most cultivated; and exceeds in the amount of its population all the other Isles together.

Troutbeck, who was the Chaplain of these Isles from 1780 to 1796, says that in his period of residence, St. Mary's contained "about two hundred families and near eight hundred inhabitants." Its present length he adds "is about two miles and a half, and it may be reckoned betwixt nine and ten miles in circumference, and contains by estimation about one thousand, six hundred and forty acres, including the land within the Garrison." Woodley calculates it to be "about eight miles in circumference, two miles and a half in length, and one mile and a half in breadth." The former statement is the more accurate. St. Mary's is about nine miles in circumference.

The population is now nearly double its amount in the time

of Troutbeck, being a little above fifteen hundred, of these about one thousand live in Hugh Town; one hundred and twenty in Old Town, and the remaining number are scattered over the country.

The contrast between the cottages which have been recently built, and those which Woodley describes as "presenting the appearance of a ship's cabin, with the beams and planks over head painted white," is sufficiently striking. The houses in Hugh Street are very old, and many of them certainly wear a somewhat forlorn and dreary aspect; but as the visiter advances towards the Church and sees those more recently built on the Parade and in Buzza Street, towards Porcrasa, he will be impressed with a widely different feeling. He will find himself surrounded by houses with every token of cheerfulness and comfort; and when he learns that they have been built by the inhabitants themselves, and are in the majority of instances held of the Proprietor at a trifling ground rent, for forty years, he will draw the conclusion, which longer acquaintance with the place will strengthen and confirm, that the Isles of Scilly have been favoured with an unusual measure of prosperity.

The Custom House and the Post Office are in the centre of Hugh Town, at only a short distance from the Pier. The Custom House is not that building described by Woodley as "airy, spacious, and commodious," standing at the back of the Post Office in Well Lane. That room is now appropriated to the Infant School; and in it two mistresses, (themselves trained, at the expense of the Proprietor, in the Home and Colonial Infant School Society in London), are carefully and

successfully training between fifty and sixty of the infant population of St. Mary's. The more suitable and commodious Custom House in present use has been erected on the very verge of the sea, at no great distance from the pier; and is visible to all the vessels sailing into the Pool. It was built in 1841.

The town is more considerable than most visiters expect. There are several shops of some pretension, in which almost every article of domestic use may generally be obtained. Within the last few years a great improvement has been effected in the mode of carrying on business. New shops have displayed a greater variety and a larger assortment of goods; a little wholesome competition has reduced the price of articles; and every endeavour is made to meet the wants and wishes of customers.

Attention to dress prevails as much in this as in other parts of Cornwall; and the system of barter or exchange, which is carried on to a great extent, enables almost all to gratify their taste in this respect. I have often heard a comparison suggested by some of the older inhabitants between the showy, costly dresses of more modern times, and the coarse, checkered aprons or gowns of former days; when the grandsires of the present generation were wont, as my informant tells me, to ride their palfreys to Church, each with his gude wife or his daughter before him; while the more youthful members of his family came tripping along to the loved and honoured house of prayer.

The Church then stood in the midst of the fields on the Southern side of the Isle, near Old Town Bay. A portion of

the Old Church, in which the burial service is very occasionally read, is yet standing; and in it are one or two mural tablets and several grave stones with inscriptions upon them. It is about half a mile distant from Hugh Town, in which the majority of the inhabitants now reside, and where, consequently, the present Church stands.*

The burial ground is around the remains of the old Church. It is the usual practice to carry the corpse into the New Church, where the former part of the service is read, and afterwards to deposit it in the ground, which is hallowed by so many sacred recollections, and in which it may mingle with the dust of many preceding generations.

The Church, in which divine service is now performed, has been built on somewhat high ground at the East end of the main street of St. Mary's, and therefore at the entrance of Hugh Town as you approach it from the country. A Tablet within its walls declares that

In the
Year of our Lord,
1837,
This Church was erected
By the munificence of
His Majesty King William IV.

The same was completed at the expense of
Augustus Smith, Esq.

* I am unable to discover the origin of the word Hugh, and therefore acquiesce in the ingenious hypothesis suggested by Mr. Woodley. Huer in Johnson is "one, whose business it is to call out to others;" and, in the passage, quoted in the Dictionary, from Carew's survey, a Huer is

The church is a neat building in the gothic style, with open seats and a gallery at the West end. Its extreme simplicity is, perhaps, its chief ornament; and no one can fail I think to approve the taste which it displays. From the church to the burial ground is an exceedingly pleasant walk; chiefly across some fields with a gentle declivity, so that the smooth gravel road is always dry. Before you is a fine sea-view, the waves rolling in upon the bay which separates the church fields from Old Town and forming a fine back-ground to the landscape.

These prefatory observations relate to matters of interest in connexion with St. Mary's, and could hardly be embodied in what may be termed the geographical survey of the Isle; but we propose now to direct the visiter in a minute examination of its varied and beautiful scenery.

With this object he should bend his steps towards Porcrasa, a fine bay on the Southern side of the island, extending from the Garrison to Buzza Hill. It is mentioned by Troutbeck and others under the more pleasing title of Porth Cressa. By Borlase it is written Porth Crasou.

Following the foot path which tends in a South Easterly direction from the end of Buzza Street, we shall presently reach Buzza Hill. On its summit stands the windmill; and the view from this eminence will repay the fatigue of the ascent. The prospect on all sides is as charming as it is extensive.

described as one "who standeth on the Cliff-side, and from thence discerneth the course of the Pilchard." Woodley conjectures that the Hugh at St. Mary's may derive its name from having been formerly used as an eligible station by such watchers.

The Church especially is seen to great advantage. Woodley's description of this hill is exaggerated. He says "that it consists of vast masses or blocks of granite; here protruding their grey tops above the furze and fern that fringe its rugged brow and sides; there, recumbent in every posture on the smaller rocks which still remain partly imbedded in the soil, and seeming to threaten the passenger who winds his way at the base of the hill, with an instantaneous crush beneath their ponderous and (apparently) ill-supported bulks." This description partakes of that poetical licence which Mr. Woodley has, throughout his work, allowed himself. Buzza Hill, however, on its Western side presents a bold, rocky appearance. Scantily clothed with verdure, the large fragments of stone stand out from the golden blossom or the green bushes of the furze, and are in good keeping with the other features in the picture. Its Northern side, which invites attention in the walk from the town towards the church, is more in harmony with the fields beneath it, presenting a green and fertile aspect.

Woodley tells us that "on the top of Buzza Hill* are three cromlechs." By cromlechs I presume he means barrows; and of these I can discern only one. The other two have, not improbably, been destroyed, either in the erection of the mill, or in obtaining stone for building purposes. That, which is still in existence, lies to the South West of the Wind-mill. Immediately opposite Buzza Hill, on the other side of Porcrasa is the Garrison with its distinctive features

*By Borlase this Hill is called Bosow Hill; and he supposes the name to be derived from a family which once lived near this spot.

of the Star Castle and the officers' quarters which are now allowed as private dwellings. The ground between the rocky beach, and the wall encircling the Garrison, is divided into several allotments of garden, which are let at an almost nominal rent to the inhabitants. At the South Eastern extremity of the Garrison, called Morning Point, is a battery with five guns, to which together with the other means of defence, I shall more particularly refer in the excursion of to-morrow.

As soon as you have passed the Garrison you will have a distant prospect of the picturesque rocks at Annet Head, and the reefs and ledges, indicated by the white line of foam, which lie scattered in the Broad Sound. Nearer is St. Agnes with her friendly Light-house, and the fine rocks, the Kittern and the Bow, of which we have had a closer view.

Ascending the sloping ground which lies towards the South, you will enjoy a commanding view of Peninnis Head, the finest mass of rocks in the Isles. The Carn midway between Buzza Hill and this bold head-land, called, I know not why, the Dutchman's Carn, ought not, however, to be passed without notice. In itself it is sufficiently picturesque; and from it you may enjoy an extensive view towards the North West, the West, and the South. In the former direction, the town of St. Mary's on its narrow belt of sand, Porcrasa, the masts of vessels in the Pool, and the yet more distant hills of Bryher; Westwards, Annet, the Bishop and the multitude of rocks which lie in that direction; Southwards, Peninnis, the Gugh, and

St. Agnes; these different objects will, from this point, arrest a visiter's attention. Beneath is the Bluff, a fine, bold rock, not accessible from the shore. It seems to be within the distance of an easy leap from the coast of St. Mary's; but there is between the two a deep channel, which it is scarcely safe to attempt thus to cross.

Advancing towards the South, your way lies down a slight declivity to the rocks which we are about to explore; and which, as you now more nearly approach them, will be seen to be of a grand and imposing character. Lying on the upper ground, at some little distance from the sea, is a curious group, called the Kettle and Pans. The name is derived from large cavities or basons in the rocks, capable of holding a quantity of water.

As these are the most remarkable basons with which I am acquainted in the Isles, it may be expected that I should more particularly advert to the opinions which have been expressed concerning them. Troutbeck has entered most fully into the question of Druidical remains; and his opinions, stated with singular frankness and simplicity, will furnish the reader with much pleasing entertainment.* Borlase, as is well known to all who are acquainted with his valuable works, has largely discussed this subject. In the letter, to which I have already referred,† he says, when speaking of St. Mary's, "On this Island, as well as on every other, I found a great number of Rock-basons, by

* See Troutbeck's description of the Scilly Islands, pages 82, 93, and elsewhere.

† Borlase's Letter to the Rev. Charles Lyttlelton, L.L.D, Dean of Exeter, and F.R.S.

which it appears, that one and the same superstition with regard to these Monuments (for they are found generally in or near places of worship) obtain'd both here and in Cornwall, and had probably it's first rise in these Islands and the Continent adjoining, which is the reason that they are found in both Scilly and Cornwall in greater numbers than in any part of Britain. My opinion concerning the use of them you do not want to be informed of, I have always thought that they were designed to receive and preserve in their utmost purity the waters of the Heavens for holy uses; but in such doubtful cases let every man think for himself. I shall therefore only give you a description of one place, and the Basons which it contains.

"At Peninnis a quarter of a mile below the new Windmill, after passing a very stony hill we came to the Knoll of the Promontory covered with a fair Turf, in several parts of which are large Karns, and between them a fine verdure and scarce a stone to be seen. There are many Rock-basons still here, though the stones have been much cloven and carried off for building. Their houses, hedges, and fortifications being all of stone, and the limits being narrow in such small Islands, have obliged them to borrow much stone from their Karns, which I mention the rather because you may wonder, perhaps, that these which follow, and the other Monuments, are so maimed, and not one Cromleh (of which sort I doubt not there were many here formerly) to be found; but to return,

"On one Rock we saw fifteen Basons, some the largest I have seen, and round withal. Two we measured; the first

from its highest part is six feet deep, but the other parts of it's brim are not so high; the sides, as they descend, are not perpendicular but concave, the shape of the Bason is oval, six feet long and four wide; inscrib'd within this oval the bottom is circular, four feet diameter, hollow'd out as exactly as a cup; it held formerly one foot ten inches of water, but the thinner part of the brim being broke off, it holds now only eight inches. There is another Bason contiguous to, and beneath the first, and in shape more circular. It received the water from the first, when it overflowed, is six feet six inches diameter, four feet ten inches deep, and one foot three inches in water, the sides more concave than those of the other. There are thirteen Basons more of different sizes communicating their moisture to those two great ones wherever the shape of the rock would permit, otherwise discharging it over the sides another way; both the great and small are sunk into an immense rock, to which we were forced to climb up in a manner neither very pleasant nor safe. Though the spray of the sea so near them on every hand might well be supposed to fill these Basons with salt water, yet I found the water in them to be quite fresh. Let me add that fronting this group at a little distance there shoots up a prodigious rock, thin, pyramidal, twelve feet at the base, and thirty feet high, not improbably an object of the Druid Devotion."

From his larger work on the Antiquities of Cornwall, I extract the following passages. Speaking of the "devotional monuments upon Karnbré Hill, Illogan Parish" he says "On a Karn on the Western end there are artificial basons

cut in the uppermost rocks. On the second groupe there are five of the same kind, two of which have plain and distinct lips or mouths to them to discharge whatever was intended to be contain'd in these vessels; their figure circular, sometimes oblong, and seemingly without any aim at a regular figure: they were all of different dimensions, from three to one foot diameter; from one foot to six inches deep.

"After seeing several other basons on the tops of the rocks, as we advanc'd towards the East, we found a most curious orbicular flat stone, (such as in Cornwall are call'd Quoits from their figure which has pretty much of the Discus form) which was wantonly thrown down from the top of a monstrous rock, at the foot of which it now lies. On the surface of this Quoit was an exact circular bason, three feet diameter, one foot deep, and round the edges many little and shallow basons communicating with the great one."

His observations may be thought applicable to the basons which are found in these and in all granite rocks. But their appearance and their number show this to be highly improbable; and if the action of the winds and storms sufficiently account for some why not for all? Such a suggestion will I am well aware be thought by many over-bold; but in the remarks which, I have ventured to make here and in one other place, I would be understood as only suggesting that natural causes, causes in constant operation, are generally sufficient to account for the cavities in these granite rocks.

The opinion of Davies Gilbert upon this subject may perhaps be correctly inferred from the following sentence.

"Doctor Borlase has written a separate treatise on the Scilly Islands, and described in it the scanty remains of their *supposed* Druidical Antiquities.*"

There are many cavities in the rocks, as large, or nearly as large as these famous basins, which cannot from their position be supposed to be intended to collect and hold the rain. For instance in the side of that mass of granite which lies at the back of the Tooth Rock, there is a cavity of very great extent, which from its position cannot hold the smallest quantity of water. Others there are on the under surface of the rocks, a circumstance which makes the improbability of ascribing them to the labour or the art of man more strong and more manifest.

The large basons at Peninnis you may, without much difficulty inspect.

Davies Gilbert quotes from Mr. Bond's Topographical and Historical Sketches of the Boroughs of East and West Looe, the following notice of some rock-basons, in the parish of St. Cleer, and the opinion which he formed respecting them. "The basons here are of different sizes, though all of them are of the same shape, which is circular. Some of them are about a foot and a half in diameter, and six or eight inches deep; others not so large or deep. Never having seen any Druidical basons before, and having had my doubts till this time, whether they might not be natural productions caused by rain, lightning, &c. I was led to examine other rocks, whether they had (though equally exposed to the weather) similar formations, but

* Vol. iv, p. 175.

could not find a bason on any rock that was not singular either for its shape or situation. I therefore concluded that these basons were the work of art, and not of nature; and I think they were not intended for the purpose of receiving the rain for common uses, for if so, why were they not made on rocks of easy access? It is possible, however, that rain being held in a natural hollow of a rock, may decompose that part of the rock on which it rests, and being whirled about by the wind from time to time, may form these basons which we attribute to art; and if this is the case, they must continue increasing in size and depth. Have such basons ever been seen but on granite rocks? If not, probably water dissolves the feltspar and disunites the quartz and mica; and the winds driving round the water with particles of quartz at the bottom of the bason, must consequently fret away the rock and enlarge the bason."

That this is the origin of these curious basons I have ventured to assert is not only *possible* but probable.

Again he speaks of "the largest Druidical bason we had met with which had a lip or channel facing the South. We found it to be about three feet and a half (42 inches) in diameter. We did not take its depth, but I think it must have been about a foot; it was of a circular form." * I have taken some pains to obtain an exact measurement of the basons at Peninnis for the satisfaction or amusement of those who are curious in these matters. They are as follows: the smaller bason has a diameter of twenty three inches and is nearly regularly rounded. Of the larger basons one is pretty

* p. 191.

nearly circular with a diameter of sixty-seven inches and a depth of thirty-six inches. Its circumference is nineteen feet. The other is slightly oval, having a longer diameter of sixty-six inches, and a shorter diameter of fifty-eight inches, with a mean depth of thirty-six inches.

It will, hence, be seen that the "largest bason" in those huge rocks "of, I should suppose, a thousand tons weight"* is not so much as two-thirds of the size of the basons which you are now surveying, and not more than one-third of them in depth. The rock in which these are found is only a few tons in weight.

Leaving this very curious group I would advise you to return to the margin of the sea, and scramble over the rocks which project into the water. If the tide is sufficiently low you will easily find your way to the outer points of this amphitheatre of rocks. You may even plant your foot on that which, from its peculiar shape, is called the Monk's Cowl, and which is one hundred and four feet, seven inches in height.

From this giddy elevation you must retrace your steps and find the way into Pitt's Parlour. The Tooth Rock, which you will at once recognize by its resemblance to the name it bears, and which, according to Woodley, "is thought by some to have been a distinguished object of Druidical veneration," will be the best guide to this curious chamber. It stands on high ground, at a short distance Southwards, from the Kettle and Pans. Troutbeck gives its measurement as "twelve feet broad at the bottom and tapering to the top, which is thirty feet high."

* Bond.

The Parlour which is distinguished by the name of Pitt lies just under this singular rock. If any one is curious to know why this nook in the rocks is so called, he may be told, that in days long since gone by, a party of friends, of whom a Mr. Pitt was one, were wont to spend their summer evenings together in this retired and romantic spot.

From this height, as you will easily imagine, you may command a fine view of the Southern ocean, when lashed into fury by a storm. If the wind has prevailed for some time from the South or the South West, the waves break very grandly at the base of the rocks on one of which you are securely seated, the sheets of spray dash beautifully over the masses of granite which so firmly await their onset, and with a deafening roar the tide rushes up the narrow ravine or channel which, in the lapse of ages, the waters have hollowed for themselves beneath you. It is scarcely necessary to direct a visiter's attention to the large masses of rock before him and above him and on either side of him. Troutbeck speaks of them as "causing by their height and ponderosity astonishment and admiration in the beholders." The semicircle of high, bold rocks, which is crowned by the Monk's Cowl, presents a grand appearance, as you retire from Pitt's Parlour; and the fine blocks of granite, of every shape and size, scattered in all directions add greatly to the grandeur of the scene. By going to the other side of the ravine which lies beneath and opposite to the Parlour, the visiter will have a different and not less imposing view of this rocky promontory. Here, too, imbedded among huge piles of rock, is Sleep's abode, (called also a parlour). It is

both difficult of approach and hard to be found; but the trouble of searching it out is well rewarded by a sight of the vast masses of rock which are there heaped together.

Leaving, however, Peninnis Head, the tourist must press on in an Easterly direction towards Old Town. He will pass in his progress several rocks of curious shapes and various dimensions. On the right is a far-extending and irregular field of rock, for almost every part of which the islanders have a particular name. Here you may find the Jolly Rock, marked in the map, which is often visited by fishing parties; and here too, in the cliff, is Piper's Hole, at the distance of fifteen or twenty feet from the turf upon which we are treading. Troutbeck calls it "a large subterraneous cavern next the sea, which at high water washes the entrance of it." "Going in at the orifice" he adds "it is above a man's height, and of as much space in its breadth, but further in it grows narrower and lower. A little distance from the entrance within appear some rock basons continually running over with fresh water, descending as it distils from the sides of the rocky passage." A visiter will be surprized to see the insignificant place of which this is the description. It is scarcely worth the fatigue and trouble of a search, unless it be for the purpose of obtaining a draught from the clear spring of fresh water which is certainly found within the cave.

From Piper's Hole the distance is but short to the Pulpit Rock, of which the dimensions, as you now nearly approach it, will appear more and more considerable. It is difficult to conceive a rock more curiously perched than that which

bears this appropriate name. It consists of a flat rock forty-seven feet in length and twelve feet in (mean) breadth, branching out from a short, thick rock as from a pillar. It projects horizontally over a smaller rock, which might well serve as a pulpit to one, who with a voice louder than that of Stentor would essay to address in language of exhortation or command the captains of a fleet assembled on the waters beneath him. The flat rock above his head would worthily supply the place of a sounding board; and if it were possible to conceive the voice of man reaching from this point to sailors on the deep below, the pulpit and the sounding board would be in good keeping with the grandeur and sublimity of the scene. You may, if you are so disposed, mount to the top of the sounding board; you will thus be able to form a more correct opinion of the length and breadth of this curious rock, which is one of the most conspicuous features in the scenery of the coast. The view on all sides is exceedingly fine. Immediately beneath you towards the sea are vast masses of rock, very many tons in weight; at a short distance from the shore is a solitary mass of granite called Carrickstarne; and on the Eastern side of the Bay, a bold, rocky cliff stretching towards the main land. Nor are the other features in the scene less calculated to draw attention. Carn Lea, the extreme point of Old Town Bay to the West, the Bay itself with its sandy beach, the remains of the old church and the grave stones around it, the cluster of cottages in Old Town and the green fields and meadows, varying the prospect and relieving the eye, will all claim some share of notice and remark.

It is possible to reach Old Town by a nearly direct route, if the visiter is disposed to force his way over rocks and rough hedges of stones; and he will thus have the advantage of seeing Carn Lea more closely. But I would recommend him to take an easier course, and to find the path which leads to the Tower, standing about two hundred yards from Pulpit Rock. This tower was chosen by a party of the Sappers and Miners under the direction of Serjeant Steel, as the spot from which to make their trigonometrical observations. Its height above mean water has been determined by them to be one hundred and forty one feet. From this tower the tourist will find a narrow road in the direction towards the church; and at the point where it meets the main road, leading to the church and Hugh Town, he must change his course; and choosing the direction which leads towards Old Town, he may cross the fields by the path of which I have before spoken, and pay a visit to the church-yard.

Only a small portion of the old church, as before observed, is standing. It was built in the form of a cross; though at what period is uncertain. It appears from Troutbeck's narrative to have been enlarged in 1662, by the addition of a North aisle; and from a memorandum in the earliest of the parish register books, we learn "that the Southern isle of the church of Saint Mary's, in Scilly, was began to be built on the sixth day of June, 1677." * The length of the church from East to West," says Troutbeck,

* In the same register is the following entry. Scilly, November 21st, 1742. Bryher Chapel was dedicated to the pious memory of All Saints, By me, Paul Hathaway, minister to the Islands of Scilly.

"is sixty feet, and the breadth of that part is nineteen feet; the length of the cross aisle, including the breadth of the middle part of the church, is sixty-two feet, and the breadth of the cross aisles is sixteen feet." That the church had greatly fallen into decay, partly through age, yet more through neglect, may be gathered from the pages of Troutbeck, which disclose a lamentable want of care for the sacred building. Its ruinous condition may be inferred from his unvarnished statement, "in a few years, in all probability, the church will want a new roof, as it is now very bad:" and the absence of a due concern for the maintenance of the fabric, and the niggardly spirit of those in authority, is shown by the following words, "the steward says he has no orders to lay out any money in the repairs of it as formerly." Hence arose the necessity for building the church which now stands at the entrance of Hugh Town, the only fault of which is that it is not sufficiently large for the population.

The account given by Woodley of the church-yard is happily now incorrect. The inequalities of the ground, especially on the Western and the Southern side, render it difficult, if not impossible, to make it such as we could wish it to be, symmetrical and orderly. But something has been done; and the ground on the Eastern side is well arranged. It is in contemplation to take in some of the out-lying portions of fields and gardens; and, by continuing the wall recently built, to enclose a larger space for the burial of the dead. Every one will, I think, acknowledge that the situation of the church-yard is good. The high grounds

about it, towards the West, are planted with Scotch firs; and Carn Lea, which seems from a distance to form its termination towards the South East, adds greatly to the interest of the spot.

From the church-yard there is a good road at the head of Old Town bay. "This bay, as well as Porcrasa, is full of spacious ledges of hollow rocks, which probably were once covered with land, but now exhibit a dreary appearance at low water, and are very dangerous at all times." * In this bay the conger fishery was formerly carried on to a great extent. A stone trough, which will be pointed out to you in your walk to-morrow, " was formerly used for salting fish in, as this was the place where formerly all the fish, from every island were brought to be cured, when stages were erected in a field adjoining, for drying the fish in the sun." † Large supplies of the fish so cured were carried up the Straits, and exported to other places. This was an extensive branch of trade, and of great advantage to the Isles, until it was superseded by the pilchard fisheries of Mount's Bay.

The Eastern extremity of Old Town Bay, is called Tolman Point. A legend tells that from this point the monks were wont in olden time to levy a toll on all vessels sailing into the bay: and thence the name. Woodley suggests a different etymology. "Tolman" he says "or rather Tol-mên is a Cornu-British word, signifying a holed stone; and by analogy a covered rocky passage." On the question suggested by this hypothesis of Woodley, I will select one extract from Borlase; though the reader may

* Woodley. † Troutbeck.

perhaps think that there is good reason for the doubt expressed by Polwhele, when he says in reference to the Tol-mên in the parish of Constantine, "not that I think with Dr. Borlase that it was shaped by art."* Borlase thus writes, "There is another kind of Stone-deity, which has never been taken notice of by any Author that I have heard of. It's common name in Cornwall and Scilly, is Tolmên; that is, the Hole of Stone. It consists of a large Orbicular Stone, supported by two Stones, betwixt which, there is a passage. There are two of these in the Scilly Islands, one on St. Mary's Island, at the bottom of Salakee Downs; the top Stone 45 foot in girt, horizontally measur'd; the other in the little island of Northwethel, 33 feet in girt horizontal, by 24 perpendicular measurement. They are both in the decline of hills, beneath a large Karn of Rocks, standing on two natural supporters; the first has one exactly round Bason on it; the second has none, neither are there any Basons on the Rocks below, or near it; but elsewhere on the Island there are several. Both these are probably erected by Art, and the Top-stones, large as they are, brought from the Karns above, and plac'd by human strength where we see them." The visiter will judge for himself whether there is any thing in the appearance of these rocks to justify Mr. Woodley's supposition.

About midway between this point and Carn Lea, is the Gull Rock, and at some distance to the South of it is another rock, called the Gilstone.

* Vocabulary to Polwhele's Cornwall.

The Carn which rears its head at the South of the houses in Old Town, bears the same name as the point. Near it "is a sod battery, where is now only one gun, a four-pounder, dismounted. There were three guns upon this battery within fifty years past, two of which were taken away about forty years since, by order of the government."* This single piece was removed upwards of thirty years ago.

Passing through the little village of Old Town, the visiter will see upon his left the rocks on which the Castle formerly stood. There are still some small remains of the Northern wall. The height on which the Castle was built, is scarcely less than one hundred feet above the level of the sea. It is said to have been beaten down by Oliver Cromwell; many of the stones were removed from the ruins about fifty years ago, and used in building the cottages, which lie near it on the road.

At a short distance from Old Town towards the North East, is one of the best gardens in the island. The myrtle hedges, and other plants rarely found, except in greenhouses, on the main land, which are growing here in great beauty, give good proof of the advantages both of soil and climate enjoyed in the islands, and show that floriculture may be carried to any extent, if only the hurtful effects of storm and wind can be prevented by seasonable shelter. Dr. Borlase has made the same observation. "Roots of all kinds, Pulse and Sallets grow well; Dwarf Fruit-trees, Gooseberries, Currants, Rasberries, all Shrubs, and whatever rises not above their

* Troutbeck.

Hedges do very well; and even these would do better, if they would provide against storms, by planting shelters of Elder, Dutch-elm, Sycamore, and the like, in Clumps and Hedge-rows; and 'till they can reconcile themselves to the trouble and time of raising such shelters, all their Vegetables must be exposed, in proportion to their height, to the winds; but to tell you the truth, the true spirit of Planting either has never reached here, or has been forced to give way to more necessary calls." At a short distance from this garden on the left is Parting Carn, called by Troutbeck, Parton Carn; and a quarter of a mile further on the right hand is Tremelethen. The gardens and orchards belonging to this farm will show you the produce of the Island. It consists, chiefly, of a great variety of apples; and the trees at Tremelethen have the advantage of a warm aspect and good shelter.

Continuing your walk along the road which is now in progress, you will gain a view of the comfortable farm at Longstone, rejoicing in the warmth of a Southern sky; but, before you reach it, the road changes its direction and bears towards the farms at Carnifriers. This is, no doubt, a corruption of Carn Friars, as a small heap of rocks, lying near to these farms is so called. Troutbeck speaks of this part of the island as "a village which consists of several farm houses and some cottages;" a description which can scarcely be said now to apply to it, as there are but two farms and two other cottages in this immediate spot.

Leaving these farms on your right I would advise you to make your way over a gently sloping field which lies nearly

North East from Carn Friars. At the farther corner of this field is a rough road which will guide you to a farm called Normandy towards the Eastern extremity of St. Mary's. Thence your way must be Northward, across a common and along a road, presenting a succession of pretty views, to Maypole, as the Hill is called which surmounts Holy Vale. This Hill affords one of the prettiest prospects on St. Mary's. At its foot is Holy Vale a pleasant sheltered nook, with four good substantial farm houses. About a century ago this farm belonged to a family of the name of Crudge, the last member of which died in November, 1848, at the advanced age of ninety-seven. "Mr. William Crudge was deputy Commissary of Ministers in 1751, and his grand-father, Mr. John Crudge, married Ursula, second daughter of Sir Francis Godolphin." * This central farm "lies warm, well exposed towards a little Southern Cove, called Porth Hellick and so well sheltered from the North winds, that trees grow very well here, of which a few tall ones are sufficient proof; and I am persuaded that every kind of fruit tree common in England might be propogated here with success." * One of the finest trees, a sycamore, was cut down, I am told, to make room for the house which now stands at right angles to the principal building. The original farm, or, more correctly, the farm which was built after the first was destroyed by fire, consisted of the two central houses. The neat gardens in Holy Vale, in which there are some choice myrtles and a fine aloe, just now coming into bloom, will draw the attention of the visiter.

* Troutbeck.

The road, for a short distance is shaded by trees, which, screened from the violence of the winds, are of a less stunted growth than elsewhere in the islands. As soon as you have passed their friendly shelter, a stile upon the left hand will direct you to a foot-path which winds in a pretty circuit towards the South. By taking this path we secure a view of the orchards and gardens belonging to Holy Vale, and reach the high ground above Longstone.

From this elevation a nearer view of the fresh water at Porth Hellick and of the inland scenery of St. Mary's is obtained. The path above the farm will conduct us to the new road, nearly at the point which bears towards Tremelethen. You will find the return to the town expedited by the road which is thus far complete, and which will surprize you by its width, and by the good stone hedges which on either side form its boundary. A seat will presently invite you to rest awhile; and, as it is conveniently placed and commands a pleasant prospect, you may be disposed to accept the accommodation which it offers. The initials on the stone will tell you by whose care and kindness it is here placed; and, together with the date, will inform you under whose auspices the good road was formed which offers to conduct you to your inn.

Sixth Excursion.

THERE is more than sufficient for one day's employment yet remaining to be seen in St. Mary's. Starting therefore early, we will resume our examination of the Coast at the Eastern point of Old Town Bay. Here the visiter will find a foot-path in front of some cottages near to the sea, which will guide him to the rocks on the Southern side of the island; and these are to be explored to-day. There are several fine Carns and masses of Granite in this part of the island which deserve a careful survey.

At the North East corner of the Bay is the trough of which I said something in the excursion of yesterday. It "consists of only one stone, and will hold eighteen Winchester bushels. It was dug from a quarry upon Sallakey Downs, about half-a-mile distant." * It is now in a great measure concealed; for it supports an outhouse or shed; but, as it is placed at the outer corner, there is no difficulty in discovering it.

Passing Porth Minick with its white gravelly beach, we

* Troutbeck.

arrive at Blue Carn. This name describes the mass of rocks which forms the cliff at the Southern point of the isle: but it is usually distinguished as the Inner and the Outer Carn. The Inner Carn is chiefly remarkable for its laminated appearance; and this form is characteristic of many of the rocks. At the North West side of the Gugh there is a very beautiful block of granite, (which I omitted to point out in the third excursion) thus, as it were, distributed in successive layers; and many such may be seen on all the Isles. The outer Carn, that most to the South East, is a very singular group of rocks piled upon each other in every variety of form.

Church Point and Ledge is the name given to the next mass of rocks projecting into the water. The name is probably derived from the circumstance that the outer point of this ledge being in a line with the Old Church is a mark for pilots.

In the Bay somewhat more to the East, which is over-hung by the Giant's Castle, it is easy to land from a boat, however large. Upon high ground at the South Eastern corner of this bay once stood the Giants' Castle, of which Troutbeck gives a full account. "It was probably" he says "designed by the Danes as a retreat from the Saxons, in case they should be cut off from their ships, and certainly it must have been a place of great strength in those times, especially if they had plenty of provisions within it." Borlase thus speaks of it "This Castle is situated on a promontory, which towards the sea is an immense crag of rocks, as if heaped on each other: this heap, or turret of rocks declines also quick, but not so rough towards the land, and then spreads to join the

downs, where at the foot of this knoll it has first a ditch crossing the neck of land from sea to sea; then a low Vallum of the same direction; next, a second ditch and a higher Vallum; lastly, near the top of this crag, it had a wall of stone encompassing every part, but where the natural rocks were a sufficient security; this wall by the ruins appears to have been very high and thick. It is call'd, as I said but now, the Giant's Castle, the common people in these islands as well as elsewhere, attributing all extraordinary works to giants. We have many of these Castles on the Cornish cliffs; they seem designed by pirates and invaders to protect themselves whilst they were landing their forces, ammunition and implements of war, and to secure a safe retreat towards their ships in case of need. I am apt therefore to think that such Cliff-Castles are as ancient as the times of the Danish, if not of the Saxon, invasions." The visiter will form his own opinion upon the subject. By those who have had an opportunity of comparing this with more undoubted vestiges of a hostile encampment, with Brahane Ring, for instance, in the Parish of Sancreed, it will be acknowledged that the evidence in favour of such a supposition is comparatively small. There is indeed some appearance of entrenchments and fortifications, though it is difficult to conceive for what purpose they can have been constructed, unless we suppose the island to have been of far greater extent formerly than now. The highest point of this heap of rocks commands a good view of the coast, in its windings by Old Town to Peninnis; or, looking Eastwards, of the promontories of rock, which one after another jut out into the waters.

On the Western side of this Carn, just above the cliff, is the Logan Rock, which has the great advantage of being easily accessible and easily moved. Its weight is calculated to be forty-five tons.

Not far from the Logan Rock "near half-way down the hill, next the sea is a cave, among the rocks, called Tom Butt's bed, which is very dangerous and difficult to get at, the ground being so steep about it, so called from a boy who concealed himself in it, three days and three nights in the reign of Queen Anne, for fear of being impressed on board a man of war." *

On the downs to the North of Giant's Castle there are many sepulchral barrows. Borlase thus describes them in his Antiquities of Cornwall. "There is a very singular kind of Barrow which obtains throughout all the Scilly Islands; they are edg'd with large stones, which form the outward Ring; in the middle they have a cavity wall'd on each side, and cover'd with large flat stones, and over all is a Tumulus of small Stones and Earth, in some more of Earth than Stones, in others vice versa. Upon opening it, in the middle of the Barrow we found a large Cavity, full of Earth; there was a passage into it at the Eastern end, one foot eight inches wide, between two stones set on end. In the middle it was four feet eight inches wide, the length of it twenty-two feet. It was wall'd on each side with Masonry and Mortar, the sides four feet ten inches high; at the Western end it had a large flat Stone which terminated the Cavity, its length bore E. and by N. and it was cover'd

* Troutbeck.

from end to end with large flat Stones, several of which we removed in order to get the exact dimensions of the Cavity, and others had been carried off for building. Forty-two feet distant, to the N. E. we opened another Barrow of the same kind. The Cave was less in all respects, but of the same shape; the length bore N. E. by E. 14 feet, the walled sides two feet high; where the Cavity was narrowest, it was but one foot eight inches, in the middle four foot, and at the S. W. end two feet wide in the bottom. On one side, in the floor, was a small round Cavity, dug deeper than the rest. It was cover'd with flat Rocks as the former. In both these we found neither Bone nor Urn, but some strong unctuous Earth, of different colours from the natural, which smelt cadaverous. The reason why these Cavities were made so much beyond the dimensions of the human body, was probably that they might contain the Remains not of one person only, but of whole families, it being usual among the ancients for particular families to have separate Burying Places. The vulgar, however, are not easily persuaded, but that these Graves were made according to the size of the Body there interr'd, and they are still called in these Islands, The Giants Graves." Urns and other relics have, I am told, been discovered in the vicinity of these barrows, though I have no conclusive evidence of the fact.

Having passed two small bays the visiter will next come to Newfoundland Rocks and Newfoundland Point. It was on this part of the coast that a French vessel drifted in with its keel uppermost, and yet affording the means of preservation to four of its crew. It will, I think, be expected

that I should transcribe the account of so marvellous an occurrence into these pages.

"The Brig 'Nerina,' of Dunkerque, sailed from that place on Saturday, the 31st of October, 1840, under the command of Capt. PIERRE EVERAERT, with a cargo of oil and canvass for Marseilles: her burthen was about 114 tons; the crew consisted of seven persons, including the captain and his nephew, a boy 14 years old.

"At 3 o'clock in the afternoon of Monday the 16th of November, they were forced to heave-to in a gale of wind, at about ten or twelve leagues S. W. of the Scilly Islands. At 7 o'clock of the same evening, still lying-to under their close reefed main-top-sail and balanced reefed main-sail, a heavy sea struck the vessel, and she suddenly capsized, *turning completely bottom up.*

"The only man on the deck at the time was named BOUMELARD, who was instantly engulfed in the ocean. In the forecastle were three seamen—VINCENT, VANTAURE, and JEAN MARIE: the two former, by seizing hold of the windlass-bits succeeded in getting up close to the keelson, and so kept their heads above water. Poor JEAN MARIE was not so fortunate,—he must have been in some measure entangled; as, after convulsively grasping the heel of VANTAURE for a few seconds, he let go his hold and was drowned. His body was never seen afterwards. The other two, finding that the shock of the upset had started the bulkhead between the forecastle and the hold, and that the cargo itself had *fallen down on the deck*, contrived to draw themselves on their faces close alongside the keelson, (for it

could not be called on their hands and knees for want of height) towards the stern of the ship, from whence they thought they heard some voices.

"At the time of the accident, the captain, the mate JEAN GALLO, and the boy NICHOLAS NISSEN, were in the cabin. The captain caught the boy in his arms, under the full impression that their last moments had arrived.

"The mate succeeded in wrenching open the trap-hatch in the cabin deck, and in clearing out some casks which were jammed in the lazarette (a sort of small triangular space between the cabin floor and the keelson, where stores are generally stowed away): having effected this, he scrambled up into the vacant space and took the boy from the hands of the captain, whom he then assisted to follow them.

"In about an hour they were joined by VINCENT and VANTAURE from the forecastle. There were then five individuals closely cooped together: as they sat they were obliged to bend their bodies for want of height above them, whilst the water reached as high as their waists; from which irksome position one at a time obtained some relief by stretching at full-length on the barrels in the hold, squeezing himself up close to the keelson.

"They were able to distinguish between day and night by the light striking from above into the sea, and being reflected up through the cabin sky-light, and then into the lazarette through the trap-hatch in the cabin floor.

"The day and night of Tuesday the 17th, and day of Wednesday the 18th, passed without food, without relief, and almost without hope; but still each encouraged the others,

when neither could hold out hope to himself,—endeavouring to assuage the pangs of hunger by chewing the bark stripped off from the hoops of the casks. Want of fresh air threatening them with death by suffocation, the mate worked almost incessantly for two days and one night in endeavouring, with his knife, to cut a hole through the hull. Happily the knife broke before he had succeeded in accomplishing his object, the result of which must have proved fatal, as the confined air alone preserved the vessel in a sufficiently buoyant state.

"In the dead of the night of Wednesday the 18th, the vessel suddenly struck heavily: on the third blow the stern dropped so much that all hands were forced to make the best of their way, one by one, further towards the bows; in attempting which poor VINCENT was caught by the water and drowned, falling down through the cabin floor and sky-light.

"After the lapse of an hour or two, finding the water to ebb, GALLO got down into the cabin, and whilst seeking for the hatchet, which was usually kept there, was forced to rush again for shelter to the lazarette, to avoid being drowned by the sea, which rose on him with fearful rapidity. Another hour or two of long suffering succeeded, when they were rejoiced to see by the dawning of the day of Thursday the 19th, that the vessel was fast on rocks, one of which projected up through the sky-light. The captain then went down into the cabin, and found that the quarter of the ship was stoved; and looking through the opening, he called out to his companions above, 'Grace à Dieu mes

enfans, nous sommes sauvés! je vois un homme à terre!' (Thank God, my children, we are saved! I see a man on the beach!) Immediately after this the man approached and put in his hand, which the captain seized, almost as much to the terror of the poor man as to the intense delight of the captain. Several people of the neighbourhood were soon assembled; the side of the ship was cut open, and the four poor fellows were liberated from a floating sepulchre, after an entombment of three days and three nights in the mighty deep.

"The spot where the vessel struck is called Porthellick, in the island of St. Mary's, Scilly: she must have been driven on the rocks soon after midnight, at about the period of high-water, and was discovered lying dry at about 7 o'clock on Thursday morning by a man accidentally passing along the cliffs. In another half-hour the returning tide would have sealed their fate. The body of VINCENT was thrown on the rocks at a short distance from the wreck, and has been interred in the burial-ground of St. Mary's, with the usual rites of the established church.

"Not the least remarkable part of the narrative is, that in the afternoon of Wednesday the 18th, the wreck floating bottom up was fallen in with, at about a league and a half distant from the islands, by two pilot boats, which took her in tow for about an hour; but their tow-ropes breaking, and night approaching, with a heavy sea running and every appearance of bad weather, they abandoned her; not having the least suspicion that there were human beings alive in the hold of the vessel, which

was floating with little more than her keel above water!! whilst, had the vessel not been so taken in tow, the set of the current would have drifted her clear of the islands into the vast Atlantic."

Bearing towards the North we shall presently reach the Drum Rock, which, in the opinion of Troutbeck, with many other rocks, as curiously, and, according to his hypothesis, artificially placed, is "supposed to have been an object of Druidical veneration." This rock is at only a short distance from Porth Hellick, "(i. e. Cove of Willows) and doubtless so called from the plenty of Willows growing formerly in the wet grounds adjoining." * Here Sir Cloudesley Shovel found a temporary burial. The very spot is pointed out, in which his remains, when recovered from the deep, were deposited; and it is said that on that spot the grass never grows. The concise account of the terrible disaster in which the Admiral perished, as given by Davies Gilbert, will suffice for the information of the reader. Fuller particulars may be gathered from Troutbeck. "Among the innumerable wrecks that have taken place at Scilly, the most remarkable is that of the Victory, a first-rate ship of war, commanded by Sir Cloudesley Shovel, returning from a series of exploits, which continued adding to his reputation even when they failed of obtaining success. This ship, with two others of a smaller size, struck on the rocks of Scilly in the night following the 22nd October, 1705, when between fifteen hundred and two thousand men are supposed

* Borlase.

to have perished; and there is a tradition of one man having escaped, and of his relating some anecdotes of obstinacy, and even of violence, on the part of the Admiral, discreditable to him as a man, and the immediate causes of the calamity; but these additions induce me entirely to disbelieve the whole tale." *

To the North of this beach is a large pool of fresh water, which abounds with eels, mullets, and flounders. Nearly due West of this pool is "a farm house called Sallakee," † which gives their names to the fields forming the high ground towards the South.

In Borlase's Antiquities,‡ the reader may find an account of a "plane of Rock," whose area was "172 feet from North to South, and 138 from East to West." Elsewhere he says "As these stones are evidently shaped by art, and for no conceivable purpose, either civil, military, or domestic, I conclude them stone-deities; their Plint designed perhaps to express the stability of their God; and the roundness of the upper part, his eternity." § This great stone stood "on the edge of a most remarkable circular Temple at Salakee in Scilly." It is almost superfluous to add that there is no proof to be discovered now, of the truth of this statement, which depends solely on the authority of the Antiquarian.

On Sallakey Hill are two stone crosses of which it is difficult to conceive the origin or intention. They are now fixed in the stone hedge: one to the East at the Northern corner of the field; the other to the West in the middle of

* Vol. iv, p. 174. † Troutbeck. ‡ p. 198. § p. 173.

the wall, near a gate. Neither has any inscription, nor any rudely sculptured figure, as is the case with many of the crosses in other parts of Cornwall: and both are of inconsiderable size.

Dick's Carn forms the South Eastern point of Porth Hellick, opposite the Drum Rock. Near it are several barrows, very similar in their form and dimensions; all of which appear to have been opened. To the South East of Dick's Carn "is a scattering heap of rocks, very large and curious, of different forms and sizes, called Clapper Rocks."* This place is well worth visiting; for the rocks will repay a careful and minute examination. Those especially on the higher ground, above the chamber which has been used as a banqueting room, are very singular, completely covered with rock-basons. According to the theory, which ascribes these cavities to the work of the Druids, marvellous pains and labour must have been consumed in channelling these masses of granite. But it is certainly more reasonable to assert that these stones are sufficient to disprove that theory. What Borlase says of a rock at Peninnis, "On one we saw fifteen basons," might with truth be said of more than one of the rocks which are here to be seen.

Crossing the Downs from hence in an Easterly direction, the visiter will have a fine sea-view and a bold, rocky cliff, with here and there large fragments of granite. Among them is the Sun Rock of which Troutbeck gives a very minute and particular account, appending to it a dissertation on the religious rites of the Phœnicians.

* Troutbeck.

Of another rock, near to this, and bearing the name of the Giant's Chair, he speaks as "probably a seat in which the Arch Druid sat, to observe the rising sun." Few visiters will, I am inclined to think coincide in his opinion. The action of the wind and rain upon the granite is sufficient to account for this and those other cavities which the credulous have regarded as works of "art and man's device." They are, it is probable, larger or smaller, according to the proportion of feld-spar in the masses of granite and the degree of disintegration which the rock has undergone. These considerations, which more properly belong to the geologist, may perhaps account for the peculiar position in which many of the rocks are found. "Where hard and soft granite are intermixed the softer granite is disintegrated, and falls away, leaving the harder blocks and masses piled in confusion upon each other, like an immense mass of ruins." *

The rock in question will serve well the purpose of a chair to any one who is disposed to linger awhile on this high ground: for from it there is an extensive and pleasing prospect, the mainland in the distance, and in the foreground, as it were, the Eastern Isles with all their variety of light and shade. Deep Point, "the Eastern-most point of St. Mary's Island," † presents a fine mass of rocks, especially on its Southern side. In abrupt and picturesque grandeur, the Gap is perhaps second only to the rocks at Peninnis Head; or, if this be giving it too high a place, this bold Point will be allowed to rank after the Giant's Castle. From Deep Point it is not far to Mount Todden; and

* Popular Encyclopœdia. † Troutbeck.

between these two places is, I imagine, the "subterraneous cavern called Darrity's Hole" of which Troutbeck speaks. "Near this place" he adds "is a fine spring of fresh water, which issues out of a rock, but it is dangerous and difficult to be got at."

At Mount Todden "there is one gun, a four pounder, dismounted;" and "a small watch-house in which a soldier of the garrison and three islanders keep watch every night in war time, lest a privateer of the enemy should land in this part of the island, to plunder or to carry off the sheep and cattle." * This battery is now called Pellew's redoubt; and derives its name from the signal gun, an eighteen-pounder, which Lord Exmouth placed here when he was in command of this station.

From this the most Eastern extremity of St. Mary's, a visiter should bend his steps Northwards; and he will easily find the way to Toll's Island, on which there are some ruins of buildings, supposed to have been batteries." * At a short distance to the North is New Quay, or, as in the map, New Key; and the walk upon the cliff is exceedingly pleasant. From this point he will have a yet nearer view of the Eastern group of islands, which at every change of aspect present new features of beauty.

When he has sufficiently explored this part of the island, Watermill Lane opens a narrow but pleasant path towards Helveor. The 'petty rill' murmuring by the way-side, and the profusion of honey-suckle and wild flowers in the hedge make this a very delightful walk. On the left side of the lane,

* Troutbeck.

about one hundred yards from the head of Watermill Bay, is a fine spring called Lentevern Well, and at a short distance further from the sea, the road divides, and a foot-path upon your right hand will guide you over a hill to Helveor.

Nearly due North of Helveor is Inisidgen Point and Isle, the North Eastern land of St. Mary's. This carn of rocks is well worthy of examination; and its proximity to the Eastern Isles and St. Martin's secures a very pretty view, either from its summit or its base. But that, which makes this hill an object of especial interest, is a remarkably fine barrow on nearly its highest point. It is the largest which I have seen, and in most excellent preservation. Its dimensions are about fourteen feet in length, four feet six inches in width, and three feet eight inches in height; and it has five top or covering stones. Troutbeck speaks of it as "a cave of masons' work, four feet high, and four feet wide."

From hence your path will lie in a West-North-West direction; and you will have an ever-varying and most beautiful prospect as you advance.

By keeping along the coast you would have arrived at Sandy Bar, and at Pendrathen Quay, which is nearly opposite to the Crow Rock. But I would advise you to change your route, because there is not anything particularly calling for notice on this part of the coast; and that, which I am recommending, will have the advantage of giving you a view of the interior of the island. On the high ground towards the South West, in the direction of the Telegraph, there "is a stone set upright, near nine feet high, and near

ten feet round the thickest part, called Long Rock, which is supposed to have been an idol of the Druids." From the top of the Telegraph, which is two hundred and four feet above mean water, the visiter will command a panoramic view of the principal objects in St. Mary's, and of the relative situation of the other isles. In the distance, the Eastern group, St.. Martin's, Tëan, Menavawr, Tresco, with the harbours of Old and New Grimsby on either side, Bryher, the two hills of Samson, the Broad Sound, Annet, St. Agnes, and the far-stretching isles and rocks to the West: at your feet, the farms and downs of St. Mary's. In an Easterly direction from the Telegraph, "about a furlong East from Long Rock, is an ancient farm-house, called Trenoweth; and about a quarter of a mile to the South East from the same rock, is another good farm-house, called Newford, "near which is an orchard of about an acre of land, which produces very fair fruit, planted about the year 1750, by Mr. Thomas Smith, then steward to the Earl of Godolphin." * There is another farm, Normandy, called by Borlase, Normundy Tenement, to the West of Mount Todden; and several substantial, though small farm-houses in different parts of the country. The roads which are in progress through the length and breadth of the island will naturally excite surprize. They are rendered necessary by the greatly increasing traffic; and afford good proof of the prosperity of the isles. On all sides you will see most excellent materials for their formation.

Nearly due North from the Telegraph is Bant's Carn.

* Troutbeck.

From the testimony of Troutbeck we learn that, during his residence in St. Mary's, there was "a small village, called Bant's Farm, a quarter of a mile W. by S. from Toll's Hill." Though the situation assigned to this farm, "divided," as he tells us, "into three tenements," does not direct us to the heap of rocks which now bears the name of Bant's Carn, yet, doubtless, the sentence which I have quoted explains the origin of that name. To the South West of this carn is a barrow in very good preservation. It has three top or covering stones; and its sides are secured by flat stones in the manner which has before been described. It is about twelve feet in length, three feet six inches wide, two feet six inches in height. On the Downs, to the East-South-East of this, there is another barrow from which the top stones have been removed. It is otherwise very complete.

From the Telegraph the visiter must bend his steps to Carn Morval at the North Eastern side of St. Mary's Pool or harbour. Somewhat less than a quarter of a mile Westward from the Telegraph is a road which will conduct him to the fields above Porthloo. Passing at the head of several cottages which form a little village in this corner of the island, he must cross some fields covered with golden furze, and make his way to the sea-coast. The view from Carn Morval is one of the finest which the Isles afford.

Winding along in a Southerly direction, the path conducts you to Porthloo Bay, from which the church, the pier, the garrison, and the town are all seen to great advantage. The most Northern of the two islands nearly opposite this bay,

is called in the map, Taylor's Island, which at high-water appears to be only a very pretty carn of rocks, rearing its head from the midst of the deep: that to the South is Newford Island. The fine bay to which you will presently come, is called Permellin; Borlase writes it Porthmellyn. "The beach shelves almost imperceptibly to a great extent, and the sand here is of a remarkably fine quality, and 'much coveted,' says Troutbeck, 'by the Cornish people and others, for scouring brass, pewter, &c., and for drying up writing ink. Even in Heath's time, presents were made of it to many parts of England, as a curiosity.' The circuit of the beach, at high-water mark, is about one hundred and sixty yards."* The hill above Permellin to the East is called Mount Flagin, or Flagon, which Woodley ingeniously supposes to be derived from φλεγω to burn. He fortifies his opinion by the name given to a hill somewhat more to the east; and which is called indifferently Rocky and Brimstone Hill. "I am at a loss" he says "to conjecture what affinity may have been between these names and the places to which they are applied, unless beacons were formerly lighted on this part of the island; a supposition by no means improbable, when it is considered that this is nearly the highest part of St. Mary's, and commands both the bays." On this hill "are the remains of a strong building, called Harry's Walls. This was intended for a fort, and was begun in the reign of Henry the Eighth, before any other regular fortifications were erected on the Island; but the situation was ill chosen, and therefore,

* Woodley.

probably, the work was abandoned at an early stage. There is a curtain, with two bastions, remaining; the latter are hollow, and project with very acute angles. The length of the whole is sixty two yards; the face of each bastion sixteen yards; the walls are from ten to twelve feet thick, and about five feet high. Such was the peculiar excellence of the cement used in this work, that but few of the stones have been dislodged notwithstanding the exertions that have been made for that purpose; and the fortress may probably remain in its present state for centuries to come." *

On the North side of these walls, and on the summit of the hill, is a stone similar to that near the Telegraph. It is placed in a most commanding position, and stands about nine feet and a half above the ground. There is no inscription, or figure upon it, but it is generally supposed to have been "set up for an object of Druidical superstition." This stone is not so large in circumference as the other; a circumstance, probably, quite accidental.

The Western point of Permellin is Carn Thomas. Woodley suggests as a probable derivation of Thomas, "the British word Tommen, (bearing a close affinity to the Latin word tumulus,) a little hill, by which compound name this point of land is exactly described: a little hill with a heap of rocks." "Carn Thomas is a bold point of land projecting about one hundred yards into St. Mary's Pool, and dividing it into two beautiful bays. The top and sides of this point are clothed with grass, and a school-house is erected towards that end nearest the road. The height of the top stone of the carn is about eighty feet above the level of the sea." *

* Woodley.

The visiter will be amply rewarded, if he examines this carn carefully, by the fine masses of rock which are here grouped together. Whether seen from the pier, the road, or the beach, it is an object of interest; and I would recommend a yet closer survey of its beauties, by climbing its sides, and scaling its summit, from which there is, as might be supposed, a wide and comprehensive prospect.

Garrison.

The Garrison is yet to be explored; and it holds out many inducements to a leisurely walk in the evening. How beautiful the view, which may be enjoyed from its higher ground towards the West, of the setting sun. There is certainly no place in England where you can command this most lovely of all summer sights to greater perfection. The garrison is united to the main land of St. Mary's by the isthmus on which the principal part of the town is built. The approach to it is by a somewhat steep hill, which rises "to a height of about one hundred and ten feet above the level of the sea."* The entrance is at the North East corner, on the high ground above the Pier and the Pool. Over the gate is a large bell, which serves the purpose of a clock to the inhabitants of St. Mary's. Within the gate on the left hand is the guard room, in which is the clock which regulates the ringing of the bell; and an excellent barometer, placed there by the late inspecting commander, Capt. Hall, R. N., for the especial use of the pilots and

* Woodley.

masters of vessels. The road to the right, in a Westerly direction will lead you above the house of the master gunner, and the soldiers' quarters, to a very pleasant walk on a grass terrace beyond the barracks. That to the left will conduct you to the houses which were designed for the officers. The magazine for keeping gunpowder, which is bomb proof, stands near the gate through which you pass in going to these houses. There is a good broad road round the Garrison, the greater part of which has been made by the proprietor within the last few years. The whole circuit within the walls is a mile and a quarter.

There is also a very pleasant walk, on soft and springy turf, outside the wall towards the West and South, on the very margin of the sea, from which you may be tempted to explore the rocks, which form the natural and sure defence of this little citadel. The Steval and the Woolpack and other rocks, of more or less repute, will here be pointed out to you. This walk may well employ a leisure hour.

The obvious course for a visiter however will be up the broad path which leads to the Star Castle. The castle is situate upon the highest ground, and derives its name, no doubt, from its shape and figure. "It consists of eight salient angles, projecting twenty four feet."* Rudely sculptured over the door, by which you enter the precincts of the Castle, is the date of its erection, 1593, surmounted by the letters E. R. Within are several good and serviceable rooms; in one of which is a small but excellent library given by the associates of the late Rev. Dr. Bray for the use of the clergy of the islands.

* Woodley.

Beneath the Castle on the North Western side of the Garrison, are the quarters of the invalid Gunners. They enjoy here a quiet retreat, with few duties, save those of keeping the several batteries in order, and giving warning of the flight of time by ringing the bell, which hangs over the entrance. Instead of accounting it a banishment the sick soldier should regard his settlement on these Isles as a blessing of no small value. That, which Woodley speaks of as a probable event, has in fact come to pass. Many of the gentry from Penzance and from other parts of England have visited Scilly in search of health; and, through the blessing of God, have attained the object of their wishes. There can be little question that, so soon as the means of communication between Penzance and the larger towns in the West of England are complete, many will be drawn to this most healthful air; and not a few perhaps, who would in other days have been advised to seek a milder climate in some foreign land.

A walk along the ramparts commands a good view of all the islands and the seas about them; and the prospect will enable you to form some idea of the magnificent scenes presented by a storm, when the waves break wildly on the countless rocks around; or when vessels of all classes and from all countries are forced by contrary winds to drop anchor in "The Road," or to seek refuge in the harbours. As many as two hundred vessels have at the same time found shelter and safety here; and in the war time not fewer than three hundred, it was computed, lay at anchor in this port. The interest and beauty of the scene, which the Road and the Harbours at such times present, cannot easily

be conceived. Borlase thus graphically describes it.

"Sunday, June 7, in the morning, it blew very hard at East and East-South-East, and as all our Friends at Scilly had been wishing that we might have the pleasure of seeing their Harbour and Pool well set off with Ships before our return, we were in great expectation, but at our coming home at noon from Morning Service, only two little sloops appeared. In the afternoon it still blew hard, and it was wondered that no Ships should have come in, but about six of the clock, word was brought from the Hills, that seven Sail were in sight bearing away for the Islands. We then walked up into the Lines, within a Bow-shot of which the Ships must turn into the Harbour through St. Mary's Sound; in a few hours there came into the Pool before the Town thirty-five Ships, and they all lay so round that a Musket-shot from the Pier-head would reach the most distant of them, and many of them ran ashore out of choice, upon the soft sandy Beach, the rest lay all in a cluster, making as pretty a Sea-piece as can be imagined."

From the Castle you will find your way along an excel lent road to the Western side of the Garrison, from which you will have a nearer view of St. Agnes.. The Church, the Parsonage, the Light-house, and underneath it the house of the light-keepers, are all distinctly seen. You will admire the Carn which stands at the South West point of the Garrison; and then, following the road, which here rejoices in a delicious Southern aspect, you will presently reach Morning Point.

Your path will frequently be crossed by rabbits, in and

all probability by the deer, with which the Proprietor has stocked this part of his domains; and which, it is hoped, will answer his design of making the Garrison a pleasant park and an attractive walk both for the resident inhabitants and for strangers visiting the islands. With the same object he has had a bench placed here and there for the convenience and refreshment of visiters. One of these seats is near the Morning Point; and from the spot on which it stands you have a beautiful prospect of Peninnis Head projecting boldly into the deep, Buzza Hill, the Church, and Porcrasa: and then how pleasant is the promenade along the Eastern side of the Garrison, which Troutbeck calls "the mall of Scilly!" The eye reposes on the green fields between the Town and Peninnis; and when the tide is sufficiently high to cover the rocks and shoals which abound in the bay, you will be charmed by the beautiful sheet of water which separates the Garrison from the opposite coast of St. Mary's.

There are several batteries at different points in the Garrison. It may be interesting to some who see these pages to know the name of each, as it presents itself in the circuit of the lines; and thus to have the means of forming an opinion of the facilities for putting this part of the island in defence. I have endeavoured to be exact in ascertaining the names and situations of the batteries, and the caliber of the guns; and, thanks to the kindness of the master gunner, I do not apprehend any great mistake in my description.

The battery, which lies North East by North, commanding the Pier and the Pool, is called King George's. It is imme-

diately on your left hand as you enter the garrison and turn towards the South. There are four eighteen-pounder carronades, dismounted, for the protection of this important point.

That opposite the officers' quarters, about two hundred yards to the South, and which may therefore be called the North Eastern battery is the Duke of Leeds's. Here are three eighteen-pounder carronades, which would be of formidable use if it were ever necessary to bombard the town.

Benham's battery looks due East and is provided with one eighteen-pounder gun and one nine-pounder. This would be of good service if ever an enemy should attempt a descent upon Porcrasa.

The next battery looks South East and is called Morning Point. You will find here five thirty-two-pounder garrison guns which effectually defend the approach to St. Mary's Sound or Porcrasa.

At the Woolpack battery, which faces South, are four thirty-two-pounder and four eighteen-pounder garrison guns, one eighteen-pounder being on a wooden carriage and pointed at the salient angle. From the interior of this battery you have a good view of the pretty Carn which stands at this Southern point of the garrison.

Bartholomew's battery looks to the South West and is defended by three eighteen-pounder garrison guns. These may be brought into very effective play upon vessels sailing through the Broad Sound.

At the point near the sea which is due West, there is one eighteen-pounder. This point is called the Steval.

Charles's battery fronts the North West and has two thirty-two-pounder to protect the entrance to the Road.

The Store House battery so named from its proximity to the house in which stores are usually kept, is guarded by three thirty-two-pounder and one eighteen-pounder. This battery has a North West aspect by North.

The Master Gunner battery, so named because it affords protection to that officer's house, looks North-East by North and has three eighteen-pounder carronades.

The battery to the North East, from which salutes are sometimes fired, and which would effectually co-operate with King George's battery in defending the harbour and the pool, bears the name of Jefferson, and is furnished with one nine-pounder and two six-pounder guns, and three eighteen-pounder carronades.

It hardly belongs to me to express an opinion of the wisdom shewn in thus fortifying one extremity of St. Mary's, which, however well garrisoned, could not possibly afford protection to the many places even in this isle, on which an enemy might with ease effect a landing. It falls within my province, rather, to suggest the duty of thankfulness to God that there is no prospect of these engines of destruction being called into use, and of prayer to Him that the blessing of peace may long be vouchsafed to our own and to the other nations of the world.

Supplemental Chapter.

THE title of this chapter will, to a certain extent, apprize the reader that I am conscious of some omissions and defects in the preceding part of my work. Such is indeed the case. The impression is strong upon my mind that I have not done justice to the peculiar beauties of the Isles, and that much is lacking to render my book acceptable to the public. To attempt, so far as I can, to supply the further information which a visiter would require, and thus make my account more complete, shall be my present object.

Mr. Woodley, I find, has borrowed the derivation of the word Hugh from Borlase. In his letter on the Isles Borlase speaks of this peninsula as being called by the inhabitants "Hue, Heugh, or Hew, signifying a high piece of land running off into the water." In a note on this passage he says "There are several places called by this Name, which run forth into the Tamar river in Cornwall, and during the Pilchard and Herring Fishery, the man who stands on the hills to discover the fish, and thence directs the fishing boats

below, is called the Hewer." In a subsequent note he reverts to this subject; and having mentioned the places on the Tamar distinguished by the name of Heugh, he adds, "Whether such ridges of land have the name from the use they are generally applied to in looking out for fish, and the use, its name from Huer or Huye, (in French signifying to shout, and make a noise) or from Hue, colour and shew, I must leave to Etymologists to determine; certain it is that such high lands as this in Scilly are called in Scotland Heughs."

In the second excursion I ought to have said much more of the beauties of Round Island. Not only is it deserving of a visit as the home of the Puffins; but its abrupt and precipitous sides, as well as its fine carns, especially towards the North, claim for it a chief place in the bold and striking scenery of Scilly. Its highest point above mean water is one hundred and fifty-seven feet, five inches, an elevation of eighteen feet above Menavawr, and of seventeen feet above the highest ground on St. Helen's.

Of this Isle too, although my account is sufficiently full and circumstantial, I have omitted to state that it was a place "of great resort in times of superstitious pilgrimage."* Quoting from the earlier commentaries of Leland, Borlase assumes that St. Lyde's Isle is the same with St. Helen's. "St. Lide's Isle" says Leland, "wher yn tymes past at her sepulchre was gret superstition." This is called St. Helen's by the Islanders, but I suspect the true name to be St. Elid's, it being the same, as I apprehend, which in the records is

* Borlase.

called Insula Sancti Elidii. In a note on this passage he adds "Leland, or his editors have made this a Female Saint, but in the Records 'tis otherwise. In the first grant of these Islands to Francis Godolphin, Esq, 13th of Elizabeth, are distinctly mentioned (as if two different islands) 'St. Helen's Isle, Lyde's Isle,' but the word or, or alias, is here wanting, and it should be written, (at least as I conjecture) St. Helen's Isle, alias, Lyde's Isle."

The ruins of Charles's Castle on Tresco are one hundred and fifty-five feet above mean water. The Look-out House on that island is one hundred and forty-seven feet; and Great Ganilly, which I have surmised to be one hundred feet, is computed from its depression at the Telegraph to be seven feet four inches above that height. I must here, therefore, admit and correct the mistake into which I have fallen in the third excursion, p. 54. The highest point of St. Helen's is now ascertained to be, not on a level with, but thirty-two feet, eight inches, higher than the summit of Great Ganilly.

Castle Bryher, whose height has been discovered by similar calculations from the Light-House on St. Agnes, is ninety-six feet, three inches. For the accuracy of these measurements I am dependent on the observations of Serjeant Steel, to whose kindness I must again express my obligations.

In my description of the Western Isles I have neglected to direct particular attention to Gorregan; and from the observations of others I am desirous now to supply the omission. Gorregan is especially deserving notice amidst

the cluster of isles among which it rears its lofty head. "It is about a mile and a half South West and by South from Annet Island, is uncultivated and about half a mile round."*

I must here express my fears that I shall be blamed by some for having ventured on a discussion of any subject which does not clearly belong to a hand-book or guide: while I may perhaps incur the censure of others for not entering fully upon topics, which, though not falling entirely within the scope of my book, are yet closely connected with the history of the Isles.

On the subject of Druidical remains I will venture to offer some few additional remarks. Of the pillars, which have drawn the visiter's attention, on St. Mary's and St. Agnes, Borlase speaks "as sometimes idols, sometimes sepulchral monuments, and at other times of various other uses among the ancients." In his larger work he enters more fully into the subject of these rude stone monuments. "Religion" he writes "did also prompt them very early to mark out particular places for worship; and there is no room to doubt, but that these Monuments were at first of the most simple kind, rude, without art, or inscription, the Authors of them regarding more the thing to be remembered, than the materials or fashion of the Memorial, and consulting their present exigencies, without any view of satisfying the curiosity of after-ages, by affixing dates and names upon their works: they therefore chose such kind of Monuments as offered most readily, and required only the good-will, labour, and assistance of that multitude, from

* Troutbeck.

whom they could expect no elegance, invention, or beauty: of this most ancient sort of Monuments must those be reckoned, which consist of rude unhewn stones, as offering themselves in most, or all countries, on the highest hills, (such as the Ancients generally chose, for their eminency, to erect their memorials upon) and promising a longer duration than monuments of a more compounded nature.

"These stones were erected in different number, and figure, and upon different occasions.

"In Cornwall, they are sometimes found single, as Obelisks, sometimes two, three, or more, composing one Monument, sometimes disposed in a lineal, or straight direction, sometimes in a circle; often in heaps, or Barrows, and now and then, three or four large flags, or thin stones, capp'd with a much larger one, which go by the British name of Cromlêhs."

In his letter to the Dean, Borlase says "not one Cromlêh (of which sort I doubt not there were many here formerly) is to be found;" and, as this is the case, it is unnecessary to submit any remarks upon cromlêhs to the attention of the reader. Of barrows or burrows, which Borlase proves to be the more proper name,* sufficient notice has been taken in previous chapters. I will, therefore, dismiss this curious enquiry by one more quotation from Borlase, which serves to point out the origin and use, as well as the abuse, of those

* "I call them Barrows, because, that Name is commonly used; but in Cornwall, we call them, much more properly, Burrows; for Barrow signifies a Place of Defence, (Dugdale's Warwickshire pag. 782.) but Burrow is from Byrig, to hide or bury; and signifies a Sepulchre, as what we call Barrows, most certainly were."

single stones, which are found here and elsewhere in Cornwall. "Jacob erected several of these Monuments, and upon different occasions: the first we read of, is that which he erected at Luz, afterwards by him named Bethel. It was a Religious Monument, which Jacob (at once full of holy dread, at the vision of God and his Angels, and inspired with the most grateful sense of the Divine Goodness, so plainly declared to him in this gracious Vision) thought he could not do less than mark the place withall, where he had been so favoured by Heaven. 'And Jacob rose up early in the morning, and took the Stone which he had put for his pillows, and set it up for a pillar, (Matzebah) and poured oil upon the top of it, and called the name of that place Beth-el,' vowed to worship the true God only, and that the place where he had set up this Stone should be the house of God. As Jacob was at this time young in years, and had never yet lived from his parents, it may be reasonably inferred, that in this ceremony of marking out, consecrating and new naming this place, he instituted nothing new, (as being alone, and intent upon other things, viz. the length, danger, and issue of his journey) but followed the customs of his Ancestors, so that Antiquities of the kind we are now discoursing may be justly concluded older than the times of this Patriarch.

"As Jacob erected this Religious Memorial at Beth-el, Joshua set up another of the same kind, and upon a Religious occasion. He had called all the tribes to Shechem, and after reciting the message to them, which he had in charge from God, he exhorted them to serve God only, and they covenanted so to do. 'And Joshua took a great Stone, and

set it up there under an Oak, that was by the sanctuary of the Lord; and Joshua said unto all the people, Behold this Stone shall be a witness unto us, for it hath heard all the words of the Lord which he spake uto us, it shall be therefore a witness unto you lest you deny your God.'

"These are the first simple Memorials erected by true Believers, on a Religious Account. As for the Gentiles they set up pillars of the same kind in every country, but with very different ends, from those of Jacob and Joshua; for, as, afterwards, when Arts were invented, and became applied to the purposes of Superstition in making images, adorning Altars, constructing Temples they worshipped Statutes, and Images; so before Arts they worshipped those Rude Stones. Some think that God's appearing in a pillar of fire by night, and of a cloud by day, suggested to the Gentiles the contrivance of setting up Stone Pillars, and worshipping them, as the resemblance of that form in which the Deity had chosen to appear. But it is evident, that the Heathens had this custom of worshipping Stone Pillars, before the migration of Israel out of Egypt, for the children of Israel, before they came into Canaan, are expressly prohibited from worshipping these Idols, common at that time in Canaan, and therefore not borrowed from any appearances in the Peregrination. That Canaanites worshipped them as Gods, we learn from the express prohibitions given to the Israelites. 'Ye shall make you no Idols, nor graven Image, neither rear you up a standing image, neither shall ye set up any Image of Stone in your land to bow down unto it.'"

On the price of provisions the reader will probably wish to have some information; and the rather, as some change has taken place in this matter since the publication of Mr. Woodley's survey. The principal meat sold upon the Isles throughout the year is beef; and the price has been for some time past and is now 5½d. per lb. Mutton is to be obtained but occasionally, and sells at 6d. Lamb is plentiful in the early part of the year at 7d., falling afterwards to the same price as mutton. The large and tolerably regular supply of meat now enjoyed by residents upon the Isles, contrasts strongly with the account published by Borlase in 1756. "About twenty years since, the inhabitants generally lived on salt victuals which they had from England or Ireland, and if they killed a bullock here, it was so seldom, that in one of the best houses in the island, they have kept part of a bullock killed in September to roast for their christmas feast. Perhaps you may be curious to know how this beef was kept for so long a time as three months, fresh enough to roast; the way was this, they buried it in salt till the day they chose to use it, and then it was taken out of the salt untainted, as two Gentlemen who eat part of it assured me, and roasted out of compliment to Christmas day."

In one respect the Isles are in a somewhat less favorable condition as to meat than in the time of Borlase. There seems to have been a greater proportion of sheep at the period of which he writes than at present; it being rarely possible now to obtain joints of mutton. "Their sheep" he says "thrive exceedingly, the grass on their Commons being short and dry, and full of the same little Snail

which gives so good a relish to the Sennan and Phillac Mutton in the West of Cornwall. The Sheep will fill themselves upon the Ore-weed as well as the Bullocks."

Fresh butter very rarely exceeds one shilling, and usually is 10d. per lb.; sometimes being as low as 9d. Eggs are commonly 6d. per dozen, though when plentiful they are sold at 4d. The cost of fish is very trifling. Ling properly cured may be bought in almost any quantity at 2½d. per lb. The Whiting Pollock, a fish very generally approved, is common throughout the year. Plaice are almost always to be had; Soles much more rarely. On the whole there is not so great a variety and abundance of fish as the visiter naturally expects. Now and then, however, a turbot, salmon-peel, smelts, and red mullet are offered for sale at prices exceedingly low.

"Roots of all kinds, Pulse and Sallets grow well; Dwarf fruit-trees, Gooseberries, Currants, Raspberries, all shrubs, and whatever rises not above their hedges do very well." * In the orchards belonging to the principal farms there is a large variety of apple-trees, usually very productive. The largest tree upon the islands is a mulberry, which bears abundantly; and a fig-tree, growing in the same garden, yields plentifully its delicious fruit, which ripens well.

The chief source of income to the islanders is, as might be presumed, from the sea. There are fifteen good pilot boats belonging to the isles, the owners of which are constantly on the look-out for ships. Besides these not fewer than fifty vessels sail from this port, the owners and masters

* Woodley.

of which reside on the Isles. Of these vessels the greater part have been built by Scillonians. The number of shipwrights is very large, the trade of building ships having been exceedingly brisk during the last six or eight years; and many vessels have been launched in that period, reflecting great credit on the ship-builders and on the men employed in their construction. That I may exhibit a true and accurate account of the present condition of the Islanders, I must observe, in connection with this subject, that there is at this time partial, though I trust only temporary, distress among the shipwrights. The suspension of work in the yards has, of necessity, caused great anxiety and uneasiness to this body of men; many of whom have gone elsewhere in search of employment. It has followed as an almost natural consequence of the activity and enterprize in building vessels, which have of late prevailed in Scilly, that many have been tempted to learn the trade of shipwrights, who would have shown greater foresight in going to sea, or labouring on the land. Such alternations, however, are to a certain degree unavoidable; and it is to be hoped that new vessels may be ere long put upon the stocks, and full employment given to this branch of industry.

There are good schools on the four principal islands. To the education of the young the Proprietor has directed much attention; and the children, trained under his care, display great intelligence, and attain considerable proficiency in useful and religious knowledge. The boys and girls attend one and the same school, a mistress being appointed at St. Mary's for the especial purpose of teaching the girls

needlework. The number of children, including those in the Infant Schools, who are receiving instruction in all that is requisite for their station in society, bears a large proportion to the adult population. The scale of payments is arranged with a regard to the circumstances of the parents; some children are received free of any charge, and some at the small sum of one penny per week.

To the greater prevalence of education among all classes we must ascribe the progress of the Islanders in the different departments of useful and honourable employment. I have already spoken of the skill shewn by our ship-builders, and ship-wrights. It may also be told to the credit of the Scillonians, that four young persons, who had received their education on the Isles, have been trained, one at St. Mark's College, Chelsea ,and three at the Home and Colonial Infant School Society, for the work of teaching. They are now engaged in the care and management of schools, the former at Gloucester; of the latter, two at St. Mary's, and one at Tenby, in South Wales, and give unqualified satisfaction to the directors and managers under whom they are labouring. There are also at this time three pupil-teachers, two boys, and one girl, who have just passed from the rank of scholars to the higher position of candidates for the office of instructors.

The Isles have been visited by two of her Majesty's Inspectors of schools; and from their report, a more full and exact acquaintance with the advantages enjoyed by the Islanders in the important business of education, may be derived.

Borlase speaks of the Scillonians as "very apt at navigation;" and it ought to be stated, while we are speaking of education, that this very essential branch of instruction is not overlooked. There are several very young men, masters of vessels, sailing out of this port; and I have never heard a doubt expressed as to their qualifications for this responsible situation.

To those who have formed their opinion of the mental and moral qualities of the Islanders, from the letter of Borlase, it may be interesting to learn that they cannot now be charged with the gross superstition which he found prevailing among them; and which is so humorously described by him in pp. 31—33.

I am far from denying the existence of such a spirit among the Scillonians. I could mention instances, ridiculous enough, in which it has come under my own observation; but education, and a larger acquaintance with the world has much lessened the amount of superstition; and will, doubtless, more and more effectually counteract and subdue feelings, which have their origin and their chief strength in ignorance.

Persons well acquainted with Scilly, will observe a difference in the stature and appearance of the inhabitants of the several Isles; more particularly in the male part of the population. Those born on St. Martin's are generally tall and thin; those on St. Agnes, are short and stout. The natives of Tresco, who have some remarkable points of difference from those of Bryher, are between the two: taller, generally speaking, than the men of St. Agnes;

shorter than those of St. Martins.

The practice of burning the oreweed to make kelp, it is almost superfluous to state, is wholly discontinued. It was relinquished nearly thirty years ago. The sea-weed is extensively used as manure; and it is a great advantage to the farmers that, as there is an almost unlimited quantity, so they enjoy every facility, in the way of roads and openings to the beach, for removing it to their lands.

Borlase is quite correct in his remark that "there is no adder or venomous creature of any kind to be found in these Islands," so that you may range "through the high grass, briers, and ferns with the greater boldness." It is, however, still true, that many houses are infested by swarms of cockroaches.

A road-rate, and a poor-rate, neither of which is heavy, are the only taxes payable in the Islands. Nor is there, God be praised, any great amount of poverty amongst us, as most of the families are able to procure a supply of fish sufficient for their winter's store; and, when potatoes are abundant, they do not care for much besides. Some idea of the general prosperity of the inhabitants may be formed from the circumstance, that it is scarcely possible to secure the services of a day-labourer. Nor are the Scillonians at all willing to engage themselves as labourers upon the land; so that many of the farmers are obliged to hire servants from other parts of Cornwall.

On the whole, it may be questioned whether there is in any part of England, a more general appearance, or a larger measure of comfort and respectability in the same

class of life, than may be found here. It is curious to compare the probable value of this property now with the estimation in which it was held in former ages. On this point we will consult the testimony of Borlase, from whose pages may be gathered very curious and interesting information.

"In Henry the Third's time we find Drew de Barrentine Governor of these Islands for the King from the year 1248 to 1251,* and Bailiffs under him, and King Henry the Third gave him ten Pounds yearly Lands in Scilly by Deed.

"In the time of Edward the First, these Islands were in a declining condition, their want of security making a want of all things; for we find a representation made by the Monks to this King, recited in the Letters of Protection, (Monasticon pag. 1002.) 'That by the frequent resort of Mariners of all nations to that place, the Priory for want of proper Defence, was so damaged and impoverished that the Prior was not able to repair it, nor to perform the requisite Duties of Church Service.' Edward the First therefore, grants his Letters of Protection to the Prior and Priory, Monks, Chaplains, Servants, Possessions, and everything belonging thereunto. These Letters were in general addressed to all Persons of Dignity and Command under the King, but particularly to the Constable of the Castle in the Isle of Ennour in Scilly, who seems therefore to have had the chief authority here in the time of Edward the First. This Constable I suppose was Ranulph de Blankminster who (temp. Ed. I. pat. 35.*) held the Castle of Ennor †

* See Heath of Scilly, p. 181. *Heath, ibid. p 186.

† Otherwise called Enmour, or the great Island.

in the Islands of Scilly by the service of finding and maintaining twelve armed men at all times, for keeping the Peace in those parts: He held the Islands of Scilly also of the King, paying yearly at Michaelmas three Hundred Puffins, or six shillings and eight-pence, and 'John de Allet * held all his Lands and Tenements in Scilly of Ralph Blanckminster, by Knight's Service, and by being Keeper of the said Ranulph's Castle, and by other personal services by himself or by two men.' "

"By an Inquisition in the first of Richard the Third, A. D. 1484, I find the said Islands were yearly worth 'in peaceable times forty shillings, in times of war nothing.' To such a low condition were they reduced in the time of Richard the Third. We found them declining in the Wars of Edward I. and Edward III, but by the fatal consequences of the long Civil War betwixt York and Lancaster, they seem to have been on the Brink of being utterly forsaken. What remained to the Laiety was little or nothing worth, and the Portion of the Religious could not be in a much better condition."

The historian has not failed to trace the gradual rise and improvement of this portion of the British dominions; and the visiter will, I think, be glad to read his observations. "From private hands they came to the Crown by exchange in Queen Mary's time; † but in the Thirteenth of Elizabeth

* Heath, p. 187.

† "Hæc Insula tenta fuit per redd. 300 Puffins, et postea per excambium devenit ad coronam temp. Mariæ Reginæ." Tenures in the Dutchy of Cornwall (belonging to John Anstis, Esq.; late Garter King at Arms) taken the Seventeeth of James the First."

were granted by her to Francis Godolphin, Esq.; and from his time we may date the Recovery of these Islands, little Colonies (like great Empires) having their sickly times, from which they are sometimes restored, and in which they sometimes expire.

"Queen Elizabeth saw their importance, and having the Spaniards, then the most powerful nation by sea in the world to deal with, ordered and encouraged the above mentioned Francis Godolphin (Knighted by her in 1580, and made Lord Lieutenant of the County of Cornwall) to improve this station. Star Castle was begun, and finished in 1593. At the same time were built a Curtain and some Bastions on the same Hill, and more intended, which are now near finished; Enough was done at that time to guard the Harbour tolerably well, and the Pool just below the Castle: This Castle being built and properly garrison'd, Houses were soon built below the Lines upon the edge of the Pool, and Inhabitants were encouraged to settle here, seeing the place convenient for Ships bound into either channel to touch at, commodious for fishing, secure from Pirates, and national Enemies, and Land cheap and improveable by means of the plenty of Ore-weed and Sea-sand. Before Queen Elizabeth, the Inhabitants were so few, and the Value of the whole Lands so inconsiderable, that Sir Francis Godolphin was to pay ten Pounds only, as yearly Rent to the Crown, but the safety of the Islands being so well provided for, the Interest and Popularity of the Godolphins, uniting with the conveniences of the situation, brought here such a number of people, that all notice of the old

Inhabitants was soon lost, through an universal attention to the interests of the new. It may surprize one at first coming to find so few places with British names, but it must be observed that the new comers had no relation to the old Inhabitants, nor consequently any affection for their Customs or Language, but, as to avoid confusion, all people must have names for Places, as well as Persons, it was soon found to be a distinction easier learnt by the generality to call the Lands after the names of the Occupiers, than to retain the more uncouth, and to the vulgar, insignificant old names. Hence it is that so many modern family names are affixed to places.* This was a new beginning as it were, to the Settlements at Scilly, but like all other new Settlements, it requires Time for the Lands to be cultivated, the Harbours to be fenced, and the People to increase. From its first Grant to the Godolphins it has been gradually rising; the Inhabitants are considerably more than they were eighty years since; some Islands which had then few or no Inhabitants, or House, or Field, have now many; their Buildings and Numbers are still increasing, their Lands improved, but still capable of much improvement."

That improvement has been enjoyed by the Isles and their inhabitants of late years to a greater extent than would have been anticipated by Borlase. There is still room for improvement as there ever will be. But a comparison of the present

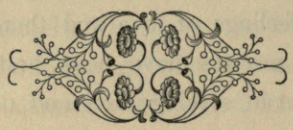
* "Thus, Bant's Karn had its name from the Family of the Bants, Bosow Hill from the Bosows; and the Tenements now call'd Watt's, Bamfield's, Leg's, Toll, Thomas, &c., from the Surnames of the Holders; These were names familiar to the newly settled Inhabitants and therefore readily preferred to the British, which, however it must be allowed by all Etymologists, were generally imposed with great propriety and expression."

state of the Isles of Scilly with their condition fifteen or twenty years ago will suggest abundant causes of gratitude mingled with surprize. The inhabitants, especially of the off-islands, were then poor, dependent, untaught. They are now living in the enjoyment of many comforts, independent, and having all the blessings of a good education within their reach. There is not only no room for the doleful accounts given by Mr. Woodley of the extensive distress felt in the off islands of Scilly: no occasion for the appeal which he makes to the sympathies of the benevolent and the assistance of a paternal government; but however strange it may appear, it is nevertheless true that the Islanders have derived no permanent advantage from the large subscriptions raised upon their account and intended for their benefit. It is matter of great difficulty to account for the expenditure of the sums collected from all parts of England for them. Their recovery from a low and debasing state of poverty has, by the blessing of God, been wrought out by themselves, under the wise and firm superintendence of the Proprietor, Mr. Augustus Smith. All, who have an intimate acquaintance with the islands, will acknowledge that a wondrous and most beneficial change has been wrought in their condition and prospects, since he has had the direction and control of their affairs. The subdivision of farms, in order that all the members of a family might live upon the land, has been altogether stopped. Very recently, when by the decease of former tenants a fitting opportunity was offered, the farms were, to a great extent, re-arranged and re-distributed. Land long uncultivated and unbroken, if ever

before tilled, is now being brought under the plough. Excellent roads are either completed or in progress in all the principal islands. Efficient schools offer the blessings of education to the young; and those, who are of an age to enter upon the active business of life, are very sufficiently qualified to get their own living and to do their duty in that state of life into which it shall please God to call them.

I can scarcely conceive a better wish for the Scillonians than this; that they may enjoy as great an amount of moral and religious, as they now enjoy, of worldly prosperity; that the mercies, which they have so largely received, may awaken in them feelings of love and thankfulness to Him by whom those mercies have been bestowed. Only let them be as diligent in serving God and doing His will, as they are in the prosecution of their worldly business: only let them attend to the precepts of the apostle, "Let brotherly love continue:* "Be kindly affectioned one to another with brotherly love; in honor preferring one another; not slothful in business; fervent in spirit; serving the Lord."† Then will the sunshine of heaven's best favour rest upon their land, and "the blithe music of contentment be heard in their vallies:" for "happy is that people that is in such a case: yea, happy is that people, whose God is the Lord."‡

* Heb. xiii. 1. † Rom. xii. 10, 11. ‡ Ps. cxliv. 15.



Sanitary Condition.

THERE can be no question that the Isles of Scilly are exceedingly healthy. Of this a sufficient proof perhaps is afforded by the great age to which the inhabitants attain. There are now living upon the Islands, many persons considerably above eighty years of age; and more than one above ninety. Between Christmas 1842, and Midsummer 1849, forty-two persons were buried in this parish, whose united ages amounted to 3579 years; giving an average of 85 years and very nearly a quarter to each. Of these, two reached the age of 97, two of 92, two of 91, and one of 90.

Through the kindness of our medical man, J. G. Moyle, Esq., I am enabled to lay before the reader, a synopsis of the Births and Deaths, (from all, and from specified, causes) in the Isles of Scilly, between the first of January, 1838, and the thirty-first of December, 1847, a period of ten years.

Births.	Average.	Deaths.	Average.
Males . . . 378	37.8	Males . . 209	20.9
Females . . . 377	37.7	Females . . 200	20.0
Total . . . 755	75.5	Total . . . 409	40.9

CAUSES OF DEATH.

All causes	409
Deaths from specified causes	394
Zymotic (Epidemic, Endemic,) or contagious diseases.	42
Sporadic Diseases, viz.—	
Dropsy, Cancer, &c.	10
Brain, spinal marrow, nerves and senses.	59
Heart and Blood Vessels	9
Lungs and Organs of Respiration.	85
Stomach, Liver, and Bowels.	28
Diseases of the Kidneys and other urinary organs.	5
Childbirth and Diseases of the uterus.	4
Rheumatism, Diseases of Bones, Joints, &c.	4
Skin	0
Old age	53
Drowning.	4
Suicide.	2

Deaths from the most important special causes.

Small Pox	3	Tetanus	2
Measles	0	Bronchitis	3
Scarlatina	24	Pneumonia	5
Hooping Cough	17	Peripneumonia	2
Diarrhœa	6	Asthma	6
Dysentery	4	Phthisis or Consumption	68
Typhus	7	Croup	2
Dropsy	7	Stomach	6
Cancer	3	Liver	5
Cholera	1	Childbirth	4
Hydrocephalus	3	Drowning	4
Convulsions	37	Suicide	2
Apoplexy	7	Sudden Deaths	2
Paralysis	9	Rheumatism	1
Epilepsy	6	Old age	53
Cephalitis	7		

From an inspection of these Tables, it will be seen that Phthisis is by far the most frequent disease in these Islands; though not more common here than in most parts of England. It is somewhat singular, that of the sixty-eight persons whose death was caused by this disease, thirty-four were males, and thirty-four were females. The prevalence of this disorder is to be attributed to variation of climate, the Scrofulous Diathesis, and, particularly among the females, sedentary habits.

It will also be seen that the Isles are remarkably free from Typhus, and other diseases of an Asthenic character;

and that they are not often visited by Epidemics.

In connection with this subject, it may be observed, that the Islands are, through God's mercy, plentifully supplied with water. It cannot be said that they suffer, to any very serious extent, from drought. There are, moreover, upon St. Agnes six wells of fresh water; upon Sampson, one; in Bryher, six; in Tresco, seven; in St. Helen's, one; in Teän, one; in St. Martin's, five; in St. Mary's, above thirty.

Lentevern well in Watermill Lane; the well at Sallakey, nearly opposite the farm-house; the well in Holy Vale, at the back of the farm house; and the Moor-well, opposite Permellin, are running wells, and chiefly famed for their purity and softness. The depth, at which the springs lie below the surface of the ground, varies between four feet, and thirty feet. The attention of Borlase was drawn to this important point; and he thus writes, "There is a good well at Holy-vale, even with the surface, a fons perennis, and a deep one in the Lines belonging to the Master Gunner, the Water of which, compared with that of the celebrated Gun-well of Trescaw, I found, by my Hydrometer, to be of equal lightness."*

* Letter. p. 79.

Birds.

Rare birds are frequently seen and captured in the Isles of Scilly; and several contributions of great value have been made from this place to the extensive collection of British birds, formed by Edward Hearle Rodd, Esq., at Penzance.

From Yarrell's history of British Birds, and from the communications of Mr. Rodd, I have derived the information which I here lay before the reader. To the kindness with which Mr. Rodd acceded to my request, that he would supply me with these interesting notices of birds now in his possession, and to the trouble which he has taken in revising this paper, I am under great obligations, and beg thus to tender to him my best thanks.

The Isles of Scilly are peculiarly adapted by their situation so far to the West, and by their precipitous, rocky character, for the permanent residence of many among our well-known British water-birds. Nor are they less likely to be visited by some of the rarer land-birds.

The interest which has been directed of late years to this branch of Natural History, has extended to us; and the visits of experienced ornithologists have so far drawn attention to this subject, that the occurrence of any unusual or remarkable bird does not fail to attract the notice of the Islanders.

As might be expected, the Water, or rather the Sea Birds form the division of greater general interest; but several rare Land Birds, not before noticed, have within the last few years, been observed in the Islands.

Land Birds.

In this division may be mentioned the rarest of the three British Shrikes, *(Laniadæ)* the Woodchat, *(Lanius Rufus)* a mature specimen of which was caught in a fishing boat near the Islands, in the spring of 1840.* Of this bird several specimens were obtained during the last Autumn. The adult specimen, and also one in immature plumage are preserved in the collection of Mr. Rodd.

The rose-coloured Starling, *(Pastor Roseus)* another beautiful and rare species, has been obtained from the Islands;† and in the year 1847, several instances of the Hoopoe, *(Upupa Epops)* a bird remarkable at once for its elongated crest, its beautiful plumage, and graceful form, occurred and were captured.‡

The Turtle Dove, *(Columba Turtur)* is commonly observed

* See preface to Yarrell's British birds. † Ibid. Vol. ii, p. 52.
‡ Ibid. vol. ii, p. 171.

here in the Summer months; and the Stock Dove, *(Columba Œnas)* has in two instances been obtained from the Islands. This circumstance deserves the more especial notice, as its congeners, the Ring Dove, Rock Dove, and Turtle Dove are recorded in the Cornish Fauna, whilst the Stock Dove is not known.

Another very rare bird was observed at Tresco, in the years 1848 and 1849; and, from its remarkable and brilliant yellow plumage, with black wings, no doubt exists of its being the Golden Oriole, *(Oriolus Galbula.)* The probability is increased by the circumstance of an adult specimen having been killed some years ago at the Land's End.

Mr. Rodd also obtained last year a very valuable addition to his collection from Scilly, in the Scops-eared Owl, *(Strix Scops.)* This bird is remarkable for its diminutive size, and also for the beautifully pencilled brown and grey shadings of its plumage. The Short-eared Owl, *Strix Brachyotos*, periodically visits the Islands, appearing with Woodcocks in the autumn.

During the last Autumn, the period at which the migration of our smaller British birds to Southern regions takes place, the Isles were visited with hosts of our smaller warblers. Amongst them were observed the three British species of Willow Wrens, *(Sylviadæ)* viz.: the Wood Wren, the common Willow Wren, and the Chiff-chaff. The former species is unknown in the West of Cornwall; but the whole family are lovely in form, and delicate in their habits and pursuits. Another little migratory bird, quite new to Cornwall, the

Reed Wren, (*Salicaria Arnudinacca*) closely allied to the Sedge Warbler, (a well-known bird which frequents moist ditches, and which sings in the night,) has also been found here in several instances.

The Pied Fly-catcher, (*Muscicapa luctuosa*) another species hitherto unknown in Cornwall, was also captured together with black Red-starts, (*Phœnicura Tithys*) common Red-starts, (*Phœnicura Ruticilla*) black-cap and garden Fauvettes, (*Curruca*) all of which, except the black-cap, are uncommon in the West of Cornwall. Their appearance at Scilly, may perhaps be accounted for, by the prevalence at the time of a strong Southerly gale.

I must not omit to mention the occurrence, amongst the company of migratorial visitants, of that beautiful bird, the Wryneck, (*Yunx Torquilla*) which was captured at the same time. Quails are occasionally seen on the Isles, and Landrails may be found every summer in suitable localities.

Some of the common British Hawks are permanently resident on the Isles, such as the Sparrow-Hawk and Kestrel; but a noble addition was made last year to our Fauna in the Osprey, (*Pandion.*) Another large hawk was observed at the same time, which from the yellow markings of its head and neck was supposed to be the Marsh Harrier, more commonly known as the Moor Buzzard.

In thus referring to the rarer species of Land-birds, which have occurred in these Isles, I have not thought it necessary to attempt a minute history of the ornithology of this outlying part of Cornwall. The same remark will apply to the Sea-birds. Speaking generally of the birds which meet the

eye of the observer, it will not be difficult to recognise the usual way-side birds, such as House-sparrows, Hedge-sparrows, Thrushes, common Wrens, Red-breasts, Sky-larks, Stonechats, Wheatears and others.

I will close this notice of the Land-birds by a curious extract from the Journal of Gilbert White, of Selborne, which is published by Yarrell in his article upon the Woodcock, "a gentleman writes word from St Marys, Scilly, that in the night between the 10th and 11th of the month, the wind being west, there fell such a flight of Woodcocks within the walls of the garrison, that he himself shot, and conveyed home, twenty-six couple, besides three couple which he wounded, but did not give himself the trouble to retrieve. On the following day, the 12th, the wind continuing west, he found but few. This person further observes, that easterly and northerly winds only have usually been remarked as propitious in bringing Woodcocks to the Scilly Islands. So that he is totally at a loss to account for this western flight, unless they came from Ireland. As they took their departure in the night between the 11th and 12th, the wind still continuing west, he supposes they were gone to make a visit to the counties of Cornwall and Devonshire. From circumstances in the letter, it appears that the ground within the lines of the garrison abounds with furze. Some Woodcocks settled in the street of St. Mary's, and ran into the houses and out-houses."* The Isles are annually visited towards the autumn by considerable numbers of this choice and favourite bird.

* Vol ii., pp. 586, 7.

Water Birds.

In treating on the Water Birds of Scilly, a larger field presents itself; and, as might be expected, this division in the ornithology of the Isles presents an important characteristic feature in their Natural History. The breeding season, comprising the months of May and June, is the most interesting period for watching the habits of our sea-birds.

From the wild hoarse scream and "kuckle" of the various gulls, the mingled sounds of the Puffins, Razor-bills, Guillemots, Oyster-catchers, Shags, Terns, &c., to the tiny musical whistle of the Ring Plover, the naturalist will have abundant opportunities of observing the busy and anxious scenes in which the various sea-birds are engaged.

Perhaps the most interesting and at the same time the most beautiful family of Birds which frequent our isles, is that of the Terns, (*Sturnidæ*) nearly all of which breed annually on the grass banks, sands and shingle, at the different isles, and especially at Annet. The Terns are remarkable for their light and elegant forms, and for the unsullied purity of their white and light blue plumage.

The Roseate Tern, (*Sterna Dougallii*) especially deserves the attention of the visiter, as presenting, more particularly in the breeding season, a most delicate and lovely rose-coloured tint on the breast, varying in intensity in certain lights, and exhibiting a peculiarly beautiful, glowing, hectic blush. This colour is so delicate and evanescent that it quickly disappears after death, if the skin is exposed to a strong light.

The Terns, which have been observed at Scilly, comprise the Common, Sandwich, Arctic, and Roseate Tern.* These all breed in the Isles. Their eggs are all similar in general appearance, the colour being clay-yellow, blotched, and spotted with black.

Of the Gulls, *(Laridæ)* the most remarkable is the largest known British species, the Great Black-backed Gull, *(Larus marinus)* which annually breeds on the high rocks of Gorregan. The Lesser black-backed Gull and the Herring Gull also breed at Scilly; and it may be remarked that the eggs of the two latter are so similar in size and colouring that it is almost impossible to distinguish them. The Great Black-backed Gull is restless and angry in the breeding season; and hovering beyond gun-shot above her nest seeks to scare away intruders by her wild, hoarse scream.

We are visited occasionally with some interesting species belonging to the Heron tribe. The first I will mention is the Spoon-bill, *(Platalea Leucorodia.)* A specimen of this bird has been killed at Tresco. It was without the plumes which adorn the adult bird. In the last week of May in the present year another specimen was shot at St. Mary's. Of this Mr. Rodd writes, "It is by far the most adult of all the examples that have come under my notice as Cornish specimens. The occipital crest is developed, which has not been the case in others that I have seen, and there are other marks which denote its being an old and mature bird."

One of the most beautiful of the British Herons has been captured on the Isles, viz., the Squacco Heron, *(Ardea*

* Yarrell, Vol. iii. p. 102.

Comata.) This bird was observed in a great many instances in the Land's End district during the last year.

Another curious and interesting species of the Heron family was also obtained in 1849, viz., the Night Heron, *(Ardea Nycticorax.)* This bird was in beautiful plumage, with three, long, subulated, snow-white feathers, proceeding from the back of the head.

The large Curlew, Turnstones, Oyster-catchers,* the latter generally known by the name of Sea-pies, are constant residents; while the Common Sandpiper and the Red-shank Sandpiper have both been seen at the Islands. The Oyster-catchers and Ring Dotterels breed annually at Scilly; and their eggs may be found, without difficulty, on the loose shingle above high-water mark, with scarcely any preparation of a nest except a slight indentation. The Ring Dotterel's egg is very beautiful both in shape and in the arrangement of its colours. From its general resemblance to the sea-shore pebbles, which is also characteristic of the Terns' and Oyster Catchers' eggs, a casual observer would probably never notice them. Eggs of the Ring Dotterel have been obtained in April, a circumstance which shews how early this bird breeds. It has not been clearly ascertained that the Turnstone has bred at Scilly, although its appearance in the summer months would seem to indicate a probability that such is the case.

Guillemots, Razor-bills, Puffins, Storm Petrels, Common Shearwaters, all breed on the Isles. The Common Guillemot, *(Uria Troile)* is remarkable for two properties in its egg.

* Yarrell, Vol. ii. p. 435.

The first is, that although the bird itself is not larger than a Bantam fowl, the egg is as large as that of a Turkey: the second property is that no two eggs are alike. They vary from a light verdigris green to white, more or less, and sometimes not at all, spotted with black.

The Canada Goose has been shot in the Isles;* the Puffin or Sea-Parrot is more common than on the coast of Cornwall.† "*Puffinus major* is very well known to the Scillonians, by whom it is called *Hackbolt*. They inform me it is a constant visitant in the latter part of autumn, and represent its manners on the water as resembling those of *P. anglorm*‡ the Manx Shearwater."

In the same valuable work there is a most interesting account of the Manx or Common Shearwater, from the pen of Mr. D. W. Mitchell, who some years since visited these Islands in pursuit of ornithological science; and whose reputation as a naturalist has placed him in an important situation in the Zoological Society of London. The description of the scene of nidification of this bird is so graphically and elegantly given that I shall venture to transcribe some portions of it.

"To the westward of St. Agnes, in the Scilly group, lies a barren island called Annet. Its northern shore is abrupt and craggy; it gradually slopes towards the south, and narrows into a sort of peninsula, where the sandy soil is rich enough to produce a dense growth of short ferns. Here is the strong-hold of the Shearwaters. Sit down on a

* Yarrell. Vol. iii. p. 92. † Ibid. Vol. iii. p. 363.
‡ Ibid. Vol. iii. pp. 504, 5.

rock which commands the little territory, and you will see nothing but the Terns, who have a station on the higher and central part of the island. You may wait all a sunny day in June, but not a Shearwater will you see on land or water. There are plenty near you all the time, however, as you may ascertain by the odour which issues from the first burrow you look into among the ferns. As soon as the sun is down you will see a little party of five or six flitting silently across the sound, or steering out to sea. The latest fishers from the colony of Terns are coming home from the sandy shallows, five or six miles away, with their throats and beaks crammed with Lance-fish, when the Shearwaters begin to wake. You will not see them come out of their holes; you first catch sight of them skimming round the corner of a rock close to the water. Perhaps they will have a great gathering, such as I encountered one evening in 'Smith's Sound.' There was a congregation of at least three hundred, in the middle of the tide-way, washing, dipping, preening feathers, and stretching wings, evidently just awake, and making ready for the night's diversion. As I wanted a few specimens more than I had dug out of the burrows, I ran my boat well up to them, and when they rose, got as many as I wished, besides a few unfortunate cripples who were only winged, and proved, by their agility in swimming and diving, a good deal too much for my boatmen. I think a good dog would have no chance with them. They allowed me to come quite close. They sit low in the water; they make no noise when disturbed, though in their holes they are eloquent enough, the Scillonian synomyns of *Crew* and

Cockathodon being derived from the guttural melodies they pour forth as the spade approaches the end in which the egg is deposited."* The reader will find other interesting details respecting this bird in the work from which I have so largely drawn.

The Storm Petrel,† the smallest web-footed bird, which braves our stormy seas out of sight and apparent reach of land, lays its two beautiful white eggs, encircled with a zone of rufous yellow towards the larger end, under cover of the over-hanging rocks of the more inaccessible islets. Mr. Rodd thus describes the habits of this little mariner, as he observed them during a fishing excursion in Mount's Bay.

"In the summer of 1834, when at a distance of six or seven miles from shore, in Mount's Bay fishing, on a perfectly calm summer's evening, ten or twelve Stormy Petrels, just before sunset, continued flying about our boat, apparently regardless of men or of any danger. We several times endeavoured to strike them with our oars; but, instead of exhibiting caution, the bird just struck at would fly almost in our faces and around our heads: and if we could have kept the boat stationary, I am certain they might have been caught by the hand. They continued hawking about with an abrupt and wavering flight, not unlike that of the Bank Swallow, sometimes near the surface of the sea, at other times pausing on the surface, touching, but not alighting on the water; then mounting up to the height of eight or ten feet, and wheeling to and fro, evidently watching the surface of the water, and perhaps the little insects and flies which

* Yarrell. pp. 509, 510. † Ibid. Vol. iii. p. 525.

sport about at this season of the year at a distance from land. They appeared at times to be in pursuit of moving objects, as they were dodging and turning continually and abruptly like the swallow-tribe. Now and then they appeared to take a momentary rest upon the water; but they were instantly up again, fanning the surface and sporting about as before. I never observed in any instance their wings entirely closed when on the water; nor did I perceive any positive swimming action. Their alighting resembled the action of gulls, when they dip in the sea suddenly and rise again, pausing only to secure an object of food."

The most common of the Sanderlings, generally so called, is the Dunlin, *Tringa variabilis* a bird remarkable for the change which its plumage undergoes in the summer and winter months. During the summer the back of the bird is dark, with rufous edges, and the belly has across it an irregular patch of black. In the winter the whole of the upper plumage is ash-grey and all the under parts are pure white.

Mr. Mitchell succeeded in capturing, when at the Isles, one of the rarest British birds, called the Pectoral Sandpiper, *(Tringa pectoralis)* a species scarcely known in the British Isles; and this specimen is now in the British Museum. This is perhaps one of the most interesting facts connected with the ornithological history of the County of Cornwall. This bird was submitted to Mr. Yarrell's inspection; and he has referred minutely to this example, in his work on British Birds under the article, Pectoral Sandpiper. "D. W. Mitchell, Esq., of Penzance, sent me in June, 1840,

a coloured drawing of the natural size, and a fully detailed description, with measurements, of a Sandpiper, shot by himself on the 27th of the previous month, while the bird was resting on some sea-weed within a few yards of the water, on the rocky shore of Annet, one of the uninhabited islands at Scilly. On the following day another example was seen, but became so wild after an unsuccessful shot, that it took off to another island and escaped altogether. The close accordance of the specimen obtained with the description of *Tringa pectoralis* in summer plumage in the Fourth Part of M. Temminck's Manual, led Mr. Mitchell to a true conclusion as to the species and its novelty and interest in this country."*

J. N. R. Millett, Esq., of Penzance, has communicated to me an interesting fact with regard to the Manx Shearwater, which it would be wrong to with-hold from the reader. "During a visit to the Isles in 1826, I tried" he states "for several successive days to get a shot at the Shearwaters, but in vain. They invariably kept just out of gun-shot, and I began to despair of success. I heard, however, accidentally, that flocks of these birds were daily seen about noon, sitting quietly on the water in St. Mary's Sound. Thither I proceeded without delay, and found numerous groups of them scattered about in the tideway, evidently reposing after their morning's fishing at sea. They allowed me to approach within gun-shot without any apparent alarm, when I succeeded in obtaining some choice specimens. In crossing the Sound on several occasions

* Yarrell. Vol. ii. p. 655.

afterwards, about the same hour of the day, I invariably witnessed similar gatherings of these birds: and from the fact of never having before or since, seen a single bird of this description *on the water*, although I have seen very many on the wing, and at various distances from land, I am led to infer that the habit of the Shearwater is to remain at rest, and probably asleep, on the water during the mid-day, the period of digestion, and to confine their fishing exclusively to the morning and evening."

A GENERAL VIEW OF THE

Zoological Features

OF THE SEA ROUND THE SCILLY ISLANDS.*

Wherever animals are sought for, there are several conditions of importance, upon which depend not only the result itself, but even the probability of it. The geological formation of the islands, the climate and the strength of the tidal currents, may fairly be called the most important regulators; and before I give a brief sketch of the marine zoology, I cannot but draw the attention of the reader to these three constituents of the physical and zoological character of the Islands.

With regard to the Geology of the isles there will be found in this volume a most valuable paper on the subject; so that I have only to draw the consequences which result from the granitic formation on the occurrence of animal life. With very few exceptions, this formation is one of the most

* For this contribution to my work I am indebted to the kindness of J. Victor Carus Esq. M. D., who passed the spring and part of the summer in the Isles, with the express object of exploring these troublesome seas. A fuller account of his researches will be found elsewhere. Dr. Carus, who carried with him the affectionate regret of all who knew him, left the Isles towards the latter end of August, 1850.

unfavourable to the zoologist. He finds barren rocks, on which nothing but the irresistible force of the water seems to have any effect. In observing them more closely, however, he sees that life, even where it appears in its humblest forms, is stronger than the rude power of the elements, and he discovers animals, though few in number, yet enjoying their lives even on these sterile parts of our earth's crust. But these are only few compared with the crowd of living beings which revel in other more productive provinces of Mr. Neptune's empire. The reasons of this are easily to be found in the chemical composition of the granite, of which Silica amounts to seventy-five per cent (in Cornish Granite according to Sir Henry De la Beche); in the great resistance which it offers to the dissolving power of wind and weather; and, on the part of the animals, in the equal dislike to both these qualities. To enter more fully into the geological conditions, on which animal life chiefly depends, would lead me too far from my present purpose. I shall only suggest, that especially the very subordinate presence of lime (chalk, &c.), of which a great amount is wanted in building shells or crusts, which you find so often in lower animals, is certainly one of the most obvious reasons, why only few animals live in granitic districts.

The second condition, perhaps the first in importance, on which the peculiarity of a Fauna depends, is the climate. This is not entirely, at least not always entirely, depending on the geographical position of the place. The presence of sea or of large inland-lakes, or of forests, or the peculiar relative position, often produces quite another climate, as

indeed might be expected merely from taking the latitude and longitude. However, these influences do not affect the sea equally with the land, and my only object was to search for the denizens of the water. The Isles of Scilly are situated a little to the west of the sixth degree of western longitude and exactly in the fiftieth degree of northern latitude. Mr. Augustus Smith, whose kindness I beg to acknowledge most thankfully, informs me that the Lizard point in Tresco has exactly the same latitude as the Lizard point in Cornwall, which corroborates my statement. These Islands are therefore the most southern parts of the united kingdom, if we except the Channel Islands, the position of which scarcely admits of their being looked upon as a physical part of England. The mean temperature in summer is 58° and in winter 45°.

The prevalent wind is South-west or West-south-west. From all this it appears that the climatal conditions ought to be very favourable; and, whenever the Rennel current permits it, we may expect to find even southern forms swept in by the Atlantic waves. These same stragglers are found on the Cornish coast, the Fauna of which has been so admirably worked out.

The last, and I think not the least important fact, connected with the distribution of Zoological forms round a coast is the strength of the tide. Not being able to give results of more scientific observations I must content myself with communicating the reports of well experienced pilots and other intelligent seafaring men. From these I have learned that neap tides run one and a half to two miles an

hour, spring tides three. This is, I beg to remark, the rate at which the tidal current makes way in the adjacent ocean, the tide gaining much greater, even much more than double this strength in the numerous channels which separate the islands one from another. The height of neap tides is twelve, of spring tides eighteen feet, although the latter of course have a variation of several feet, so that the littoral zone has a range from twenty to twenty-four feet.

Having thus shortly stated, what could influence the population of the Scillonian sea, I must say that it is not at all a dense one, although there are multitudes of zoophytes and hosts of fishes; there are only a few mollusks, some worms, and a not very large but interesting number of Echinoderms (Starfish, Sea-egg, etc.)

I think it is perhaps worth mentioning for the use of naturalists, who may dredge here after me, that the statements on the nature of the ground in *Græme Spence's* map are always very correct, and they may pay particular attention to their dredge when they find in the chart an "r" in the midst of "ssh," "s," "gr," etc. At other places, however, this "r" does not signify rocks, which might endanger the dredging, but merely stony ground, as for instance in the North Channel or Broad Sound, where one may fill the dredge with stones without losing it. The most productive ground is, judging from my experience, the north-eastern, eastern, and southern side of the Islands; but I did not find so great a variety of species by dredging, as by examining the shore at low water. Next, or perhaps equally productive, was the laminarian zone, the second in depth; and it is perhaps

worth remarking that I found some animals at low-water-mark or even higher, which commonly inhabit deeper water.

It would lengthen this paper unnecessarily, if I should enumerate all the species; I shall confine myself therefore to the mention of the rarer or more characteristic forms.

Among the *Fishes*, of which I obtained specimens, the Lancelet, *(Amphioxus lanceolatus)* is the most interesting species. I found two specimens at the Northern side of the Seven Stones, in forty fathoms, two other off the Southern coast of St. Agnes, in twenty-five fathoms, and a fifth off the Creeb, in the Road, in three fathoms. Capt. Hugh Tregarthen, to whom I am very much obliged for several delightful dredging excursions in the nice Trinity yacht, "Scilly," knows, how the sight of these beautiful little animals creates joy and happiness, even amidst water-spouts and tumbling waves. Of the other fishes, some belong to the West European seas in common, as the grey Gurnard, *(Trigla Gurnardus)*; the Mackerel, *(Scomber scomber)*; the Shan, *(Blennius pholis)*; the Hake, *(Merlucius vulgaris)*; the Sole, *(Solea Vulgaris)*; the Plaice, different species of *Pleuronectes*, the Conger, *(Conger vulgaris)*; and others, which are all more or less common at Scilly; others are representative rather of the South British Fauna, as the common Sea Bream, *(Pagellus centrodontus)*; the Sandsmelt, *(Atherina presbyter)*; the Pilchard, *(Clupea pilchardus)*; and so on; lastly I found some, which occur all round the coast, though rarer than those first mentioned, as the Sun-fish, *(Orthagoriscus mola)*; the Cornish and spotted Sucker, *(Lepadogaster Cornubiencis)* and *(bimaculatus)* and some

others, or which are comparatively rare in the South, though abundant in the North, as the Cod, *(Gadus Morrhua)*; the Lumpsucker, *(Cyclopterus lumpus)*; the Herring, *(Clupea Harengus)*. Of great economical importance, are the Scad, *(Caranx trachurus)*; the Conger, the Ling, *(Lota molva)*; which are taken in great numbers, and dried and preserved as winter stores.

The greater number of *Shellfishes* were found between tide marks. Beyond these there were only the *Patella pellucida* in the laminarian roots, some minute species of *Anomia* in deeper water and some few of the almost microscopical univalves, the species of which I have not yet had means to identify. The Limpet, *(Patella vulgata)* occurs on many places even beyond high-water-mark. That there exists a specific difference between those higher growing limpets, and those nearer low-water-mark, I could not satisfy myself. The fishermen, however, despise the higher ones as coarse bait, which no reasonable fish would take. It abounds all round the Isles, and is frequently used as bait, and even as food; but I am afraid even scalloped limpets would not suit a refined palate. Equally abundant on rocks is *Turbo littoreus*, the Periwinkle, and *Trochus ziziphinus*, and *umbilicatus*, whilst Cockles, Scallops, Razor-shells, and Queens, are found in the sandy flats of Tresco and St. Martin's, though scarcer than the former.

There is also a pretty large number of naked Mollusks, found either between tide-marks on rocks, or in deeper water. They mostly belong to the genera *Doris*, *Eolis*, *Hermæa*, *Triopa*, *Polycera*, *Doto*, *Aplysia*, and *Actæon*. Especially

in favour as an habitat for some of them is that pretty sea-weed, *Codium tomentosum*, on the leaves of which, some specimens either of Actæon or Hermœa are nearly always to be found.

The lowest animals of the molluscous class, the *Ascidians*, those curious jelly-like animals, "which live at the bottom of their own lungs," have numerous representatives in these Islands, especially those social forms which live together embedded in one common mass, and which we call *compound Ascidians*. There is scarcely one stone at St. Martin's flats, or the South-western point of Samson, which does not bear some forms of these animals. Out of thirty species recorded as British, in Professor Forbes's and Mr. Hanley's work on British Mollusca, I found twenty species to be inhabitants of the Scilly Islands. I was less fortunate with regard to the simple Ascidians, finding only about eight species, most of them in deep water off Peninnis Head, and the South coast of St. Agnes.

Marine *articulated animals*, (as Crabs and Worms,) occur most generally round these Islands, yet more numerous with regard to specific difference than to the frequency of specimens of a single species. A list of higher Crustacea has kindly been sent by Mr. Couch. But also some lower forms occur, though not very plentiful. Among the parasitic sucking Crustacea, *(Siphonostomata)* I found some interesting species belonging to the genera *Cirolana*, *Cecrops*, *Læmargus*, *Caligus*, &c. And the family of sand-hoppers, water-fleas and others, which seem to be nothing but legs, have not been forgotten, when these lonely Isles were first

peopled. Only three forms of *Cirripedia*, (Barnacles, &c.,) came under my notice, the first, a *Balanus*, which covers some of the Western rocks entirely, and is abundant everywhere; the second a pedunculated form, adhering to Corallines from deep water; and lastly one out of the mouth of a sun-fish, who had gone to sleep before it occurred to him to chew his dessert. There were thousands of the common Barnacle sticking to a piece of wreck at the Western coast of Annet, but they came probably with the vessel, and do not belong to the Fauna of this place.

Of *Worms* I obtained but few specimens. The most common is a species of *Nereis*, which the fishermen use for bait, the common lugworm being rather scarce, at least at certain times of the year. Another species of the same genus is generally found in the roots of laminarians and at low-water-mark, where also some of the sedentary forms, are to be found. I did not find a single specimen of the Seamouse, *(Aphrodite)* but as representatives of the family some species of *Polynoe*. Some fishes furnished me with intestinal worms, of which *Tristoma Molae* from the skin of the same uncouth looking Sunfish is the most interesting.

The next class is that of the *Echinodermata* (animals with spinous skin.) Among the true starfishes the Gibbous Starlet, *(Asterina Gibbosa)* is the most common. It is found between tide-marks everywhere. The next in abundance is the common Crossfish, *(Uraster Rubens)* which during the time of my stay has kept between tide-marks. Rare are the spiny Crossfish, *(Uraster Glacialis)* the eyed *Cribella*, and the Butthorn, *(Asterias Aurantiaca)* of which I found only

single specimens. The Sand and Brittle-stars are represented by five species, as far as I know. The Rosy Feather-star, *(Comatula Rosea)* one of the finest animals which people the sea, "whose history is a little romance," occurred only twice in fifteen fathoms, but very frequently between tide-marks. There came up with the dredge one fine adult and one young specimen of *Echinus Flemingii*, Fleming's Sea-urchin, one of the rarest British Echinoderms, from thirty fathoms water off Menawethan. Besides this, the Common Sea-urchin, *(E. sphæra)* and Purple Hearturchin, *(Spatangus purpureus)* were frequently caught; also the green Sea-urchin, *(Echinocyamus pusillus)* made its appearance frequently. The angular Sea-cucumber, *(Cucumaria pentactes)* and the Nigger or Cottonspinner (whose systematic name I have not been able to find) the former more common than the latter, were found between tide-marks and in the laminarian zone. New to the British Fauna is a *Synapte (Duvernœa?)* which I found, dredging in very shallow water between St. Martin's and Great Ganilly, adhering to the rope.

Medusæ seem to occur abundantly, the sea sparkling in calm nights like fluid gold; but I have not yet obtained sufficient materials to give any remarks on them.

On the *Zoophytes* you will find an excellent paper hereafter; the list subjoined is so complete, that I could find but few species which were not observed by the author of "The Cornish Fauna."

Taking all together, I do not think that these Islands could be compared with regard to their zoology to other localities; to the Channel Islands for instance, which are

also granite; nor should I be inclined to believe that they could prove it to be a mere prejudice to think them less productive than other parts of the British Coast. However, they yielded not only several rare, but even new forms, and I think it will be always worth while to spend some weeks here dredging and exploring the tide-marks, the better time for which is now perhaps coming on.

Finally, I cannot shake hands without giving my sincerest thanks to all those gentlemen, who made my sojourn in this western end of the world so agreeable and instructive. Good bye!

Crustacea.

MANY of the visiters to these Islands will no doubt have observed in the course of their wanderings along the sea margin of the beaches, numerous dead crabs lying amidst the tangle of the sea-weed. These are not what they at first seem, and in fact, are not dead crabs at all; or not more so than the cast skin of the serpent is the serpent itself. On examination these shells will be found to be entirely hollow, destitute of even a fragment of flesh. The eyes, the claws, the body, are the mere skins which the former owners have left to be destroyed by the winds and waves. It must be known to all, that crabs and lobsters like most other creatures, grow; and yet perhaps it has rarely, if ever, occurred to the mind to enquire how that growth can be effected, seeing that the external case is so solid and unyielding. These fragments found on the shore will explain the mystery. All crabs and lobsters grow, first by casting off the hard external case, and afterwards rapidly enlarging the new one before it has become hard. In the

very young, this process is effected frequently through the year; but less so as they get older. Those of middle size do it from once to four times during the year, while in the very old it is of irregular and rare occurrence. When a crab is about to cast its shell, it becomes more inactive than usual; a new skin is formed under the old crust, and finally the old one is altogether removed from any vital connection with the animal. During this process the different seams become loose, and the frame fragile. In most crabs, there is a waved seam under the front of the back or dorsal surface, this becomes disunited and the two edges become separated; and this is continued quite round to the hinder legs. This separation gradually increases, and the animal, by imbibing sea-water, obtains a great lever by which all the external parts become widely separated. The animals then escape backward, leaving the shell entire, and as the parts are elastic they then close again and thus it leaves the case as perfect as if the crab still remained within. The creature after it has escaped, is as soft as wet parchment, and may be wrapped into any shape. The internal parts are all present but very indistinct from this watery condition. No sooner is the animal liberated from the old shell, than it swallows a large quantity of fluid, and distends itself to the utmost. In this state we have known a crab grow from one inch and a half to two inches and one-eighth in a very few minutes. The crabs do not remain in this soft state very long. Fresh lime is deposited in the new skin, which in a few days becomes as hard as that just shed. In casting the old shell, every part of the body is renewed. The coatings

of the eye, of the stomach, blood-vessels, and the large flat structures in the claws are left behind and re-formed in the new. If a crab has suffered an injury, or lost a claw, the injuries are repaired and the claws are reproduced in these periodical renewings of youth. Notwithstanding, however, these renovations, age will at length assert her rights, and inflict her penalties. They lose at last, their full power of entirely shedding the shell and hence frequently die in the very act. This mode of growth will readily explain what visiters will frequently find in their researches among the rocks. In the first place it shows why so many empty shells are occasionally seen washed up by the tide; in the second, why crabs in a soft watery state, are sometimes found below stones, between tide-marks; and in the last, why the claws of crabs are so irregular in size. We could willingly enter more particularly into interesting detail on on these points but our limits forbid. To those who wish to know more on the subject, we would recommend the Reports of the Polytechnic Society of Cornwall,* and the History of British Crustacea by Bell.† In these works it will be found, that the crab, like the butterfly undergoes a series of metamorphoses on its passages from the egg to the adult state. But we turn from these considerations to those of more practical utility, especially to those who are fond of crabs as an addition to the pleasures of the table.

The Common or Edible Crab, *(Cancer Pagurus)* is common from the smallest to the largest size. Those best

* Papers by Messrs. J. and R. Q. Couch.
† Published by Van Voorst.

fitted for the table are the males, the females being rarely sought after. The distinction between the sexes may at once be ascertained, by examining the triangular flap that lies bent on the under-portion of the crab; in the males it is narrow, occupying the centre of the groove only, while in the females it is widely spread even to the roots of the claws on either side. The males only are selected for the London market. Crabs are sometimes said to be in and out of season, according to the solidity of the flesh; but this can apply only to that individual case, and not to the general season. If the crabs and lobsters change their shells irregularly throughout the year, there must be many both in and out of season, during every month of the year; and the fluidity of the flesh depends therefore only on the arrival of the period in which they may be about to cast their shells.

Lobsters are also abundant in deep water, and are exported to the London and other Markets.

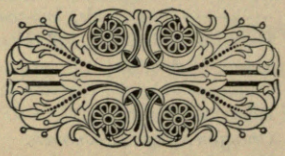
Prawns are to be found among the pools and between the rocks at low water, in great abundance; large quantities of which are weekly sent to the market at Penzance.

The subjoined is a list of the Crustacea which we have discovered in the neighbourhood.

Smaller Spider Crab..	Stenorynchus longirostis, *deep water, soft ground.*
———— ..	———— Phalangium, *deep water, among rocks.*
Scorpion Spider.....	Inachus scorpio, *in crab pots.*
————	Dorynchus, *in crab pots.*
Sea Spider	Pisa Gibsii, *crab pots.*
Corwich	Mala squinado, *in moderately deep water.*
Furrowed Crab	Xantho florida, *low water, under stones.*
Small Furrowed Crab.	——— rivulosa, *low water, under stones.*
Crab	Cancer Pagurus, *low-water rocks.*

Furry Crab.....	Pilumnus hirtellus, *under stones, low-water.*
Canker	Carcinus mœnos, *common.*
Velvet Crab	Portunus puber, *common about tide-marks, under stones.*
Nipper Crab.....	——— corrugatus, *rare.*
Swimming Crab.....	——— depurator, *rare, taken in nets.*
Marbled Crab	——— marmoreus, *deep water, nets.*
Livid Swimming Crab	——— holsatus, *fragment of shell only, at Old Grimsby.*
Swimming Nipper Crab	Polyblus Henslowii, *pilchard nets, deep water.*
Angular Crab.....	Gonoplax angulata, *trawl.*
———	Planes Linnœana, *in sea-weed.*
Long Armed Crab....	Corystes Cassivelaunus, *Grimsby, on the beach.*
Common Soldier	Pagurus Bernhardus, *common.*
Hermit Crab	——— Prideauxii, *old shells.*
Hermit ——	——— ulidianus, *shells.*
Hermit ——	——— Hyndmanni, *rare.*
Hermit ——	——— lævis.
Hairy Crab.....	Porcellana platycheles, *low-water, under stones.*
Hair Crab	——— longicornis, *low-water.*
Plated Lobster	Galathea squamifera, *off the shores.*
Spinous Lobster	——— strigosa
Craw Fish....	Palinurus vulgaris, *common in deep water.*
Lobster.	Homarus vulgaris,
Shrimp	Crangon vulgaris, *common.*
———	Hyppolyte cranchii, *crab pots, rare.*
Prawn	Palæmon serratus, *common.*

Note.—Mr. Couch, who has furnished me with the full and accurate account of the Zoophytes which is subjoined, has also favoured me with this interesting information on the Crustacea. I feel that my thanks are a very inadequate return for the pains which he has taken on my behalf.



Zoophytes.

The creatures included under the term Zoophyte are exceedingly interesting; for though rooted and arborescent, and in many other particulars assuming the external appearance of vegetables, yet they are in reality of an animal character. It may be difficult to persuade the uninitiated of the truth of this. Fixed to their bed by roots as perfectly as any tree, with branches spreading in all directions, with buds and blossoms, and a periodic developement of fruit which falls off when ripe; with characters thus vegetable, it seems a contradiction to the evidence of our senses to suppose them to be of any other than vegetable origin. But notwithstanding all this their animal character is undoubted. The little cups which are observed to give the zigzag appearance to the branches and stems of the horny kinds, are the habitation of the little polypes which have erected the superstructure. The polypes nestle in these cups when in a state of rest, but when taking their food, they protrude themselves from their hiding place and extend their flexible

arms to catch their prey. This is no sooner done than it is conveyed to the mouth and into the stomach, where it is digested. The nourishment thus taken by each polype is conveyed to all parts of the tree by means of a central vital pulp, which connects all the polypes together. The larger cells frequently observed, are the fruit or ovarian vesicles, and are produced in the summer and autumn, then ripen and fall off. These cells contain small globes covered with minute hairs, which are constantly in motion. When the grains have escaped into the surrounding water, they whirl themselves about, like worlds in miniature, in search of a place on which to rest. According to the temperature is the time thus occupied. Having settled on a fitting spot, the hairs on the lower part become converted into roots, and that, which was before so active and unrestrained a creature, becomes rooted for as long a period as life shall last. The roots below increase and the upper parts shoot up into the forms characteristic of each species. It would be out of place in a work like the present to enter into the strange eventful history of these creatures; to say how they resist the injuries of the knife, how they can be cut up and yet each part can become a new animal, or how they can be turned inside out, and yet digestion will go on as well as before; these points will be found fully described in works dedicated to this branch of Natural History.

The species here enumerated have been taken among the islands. In making the examination the collector was satisfied with a single specimen of each, and hence he did not carefully note the frequency with which each species

occurred. There can be no doubt, but that the localities in which they may be found would have been increased, if time had permitted a longer search, and several species will probably be added to the list by subsequent observers. The present enumeration therefore, must be taken as the result of a very limited examination, and must be considered as only an approximation to the true number. The names employed are chiefly those used in the third part of the Fauna of Cornwall; and this has been done to facilitate any reference which collectors may be desirous of making: for in that work there is an extensive list of synonyms for each species. Among those here enumerated is the *Gorgonia flabellum*, a species found also by Dr. Borlase on the shores of Mount's Bay. I think it must be allowed that the specimen of Mount's Bay and that found at Bar Point are Foreign. Both were dead when discovered, as well as much injured, and the great number of homeward-bound vessels that shelter among the islands will fully account for the occasional appearance of the species in that locality. After extensive dredging and examination of the dredges of trawlers from different parts of the shores, no living specimen has yet been discovered.

The subjoined is a List of Zoophytes found at Scilly.

Coryne squamata, *on sea-weeds and rocks between tide-marks. Peninnis Head, St. Mary's, St. Agnes, and Tresco.*

Hydractinia echinata, *St. Mary's, Tresco. Formerly supposed to be a variety of C. Squamata.*

Hermia glandulosa, *on stones between tide-marks, St. Mary's, St. Agnes.*

Tubularia ramea, *from deep water, between Samson and Annet.*

——— indivisa, *off St. Mary's, deep water.*

Tabularia larynx, *at low-water mark, on the under surface of overhanging rocks in muddy situations, Tresco and Samson.*
Thoa halecina, *a shell from deep water off St. Mary's.*
Sertularia polyzonias, *Var a. and b., with S. Ellisii, on shells and stones, from deep water.*
——— pumila, *between tide-marks, on fuci, St. Mary's, Tresco, St. Agnes, and St. Martin's.*
——— tamarisca, *St. Martin's, deep water.*
——— abietina, *St. Mary's, off Old Town.*
——— filicula, *on sea-weeds, L. digitata, &c.*
——— operculata, *St. Martin's, on the stem of large sea-weeds.*
——— argentea, *from deep water off Kettle Point, Tresco.*
——— cupressina, *Tresco.*
Thuiaria thuja, *fragments found on the beach at Porcrasa Bay, St. Mary's.*
Antennularia antennina, *St. Mary's.*
——— ramosa, *off Johnston, St. Mary's.*
Plumularia falcata, *deep water, Tresco.*
——— cristata, *on the stems of the larger sea-weed.*
——— catherina, *fragment on a shell at St. Martin's.*
——— frutescens, *St. Mary's.*
Laomedea dichotoma, *in pools between tide marks.*
——— Geniculata, *in pools.*
——— obliqua, *a small specimen from Bryher.*
Campanularia syringa, *St. Agnes.*
——— dumosa, *parasitical on P. falcata, Tresco.*
Gorgonia verrucosa, *from deep water.*
——— flabellum, *a dead specimen on the beach under Bar Point, St. Mary's.*
Alcyonium digitatum, *deep water, on shells.*
Turbinolia borealis, *on a stone from deep water; a variety, I believe, of Caryophyllia Smithii.*
——— Milletiana, *dredged off the coast of Scilly, by Mr. Mac Andrew, and Professor Forbes.*
Caryophyllia Smithii, *deep water, on stones*
Zoanthus Couchii, *off the North of Tresco.*
Capnea sanguinea, *Tresco. Deep water, on a shell.*
Corynactis viridis, *St. Mary's.*
Actinia mesembryanthemum, *pools and rocks.*
——— margaratifera, *St. Mary's.*
——— viduata, *Tresco, sandy places between tide-marks.*
——— alba, *in muddy crevices.*
——— chrysanthellum, *inlets in a sandy nook, North of Tresco.*
——— gemmacea var *b.*, *Tresco.*
——— parasitica, *deep water, on a shell.*
——— bellis, *in pools and in crevices and muddy nooks.*

Actinia dianthus, *pools.*
Anthea cereus, *pools.*
Lucernaria auricula, *beyond low-water-mark, underneath the Castle, St. Mary's.*
——— fascicularis, *by Dr. Carus, at Norwithiel, on muddy stones, at low-water-mark.*
Tubulipora patina, *on stones and shells from deep water, St. Martin's.*
——— hispida *St. Martin's.*
——— penicillata, *St. Martin's.*
——— phalangea, *St. Martin's*
——— serpens, *St. Martin's*
——— obelia, *Tresco, from the North Shore.*
——— trahens, *St. Mary's, deep water.*
Crisia eburnea, *among the roots of the larger sea-weed.*
—— cornuta, *Roots of sea-weed.*
—— chelatus, *Roots of sea-weed.*
Hippothoa catenularia, *on shell from deep water.*
——— cassiterides, *on a stone between the Islands and Land's End.*
Cellepora pumicosa, *on shells and stones.*
——— ramulosa, *off Annet.*
——— cervicornis, *deep water.*
Lepralia granifera, *on a stone at St. Agnes.*
——— pedilostoma, *St. Agnes, St. Mary's.*
——— reticulata, *St. Agnes.*
——— variolosa, *St. Mary's.*
—— nitida, *St. Agnes.*
——— tridentata, *St. Agnes.*
——— immersa, *St. Mary's.*
Membranipora pilosa var *a.* and *b.*, *on sea-weed.*
——— membranacea, *on sea-weed.*
Cellularia ciliata, *on corallines and roots of sea-weed.*
——— scruposa, *among the roots of sea-weed.*
——— reptans, *among the matted roots of sea-weed.*
——— avicularia, *from deep water on the roots of sea-weed.*
Flustra foliacea, *a fragment on the Crow Bar, St. Mary's.*
——— membranacea, *on the fronds of sea-weed, as a thin gauze-like expansion.*
Eschara foliacea, *deep water.*
Retepora reticulata, *fragment on the strand at Old Town Bay.*
Salicornia farciminoides, *deep water.*
Valkeria spinosa, *on sea-weed, Tresco.*
——— cuscata, *on Sert Pumila.*
Serialaria lendigera, *on sea-weed, Tresco.*

Ferns.

I am indebted to the kindness of E. W. Cooke, Esq.,* for some interesting information relative to the Ferns which are to be found in the Isles. Mr. Cooke did not visit us until the month of September, when, to quote his words, "some species disappear, or rather so dwindle down as not to be readily recognized." Of these, however, he says "I do not think that more than two may have escaped me."

"Without doubt" he adds "the grand botanical feature of Scilly, is that most beautiful and very interesting species, *Asplenium marinum*, or Sea Spleenwort. It attains among the spray-washed rocks, which gird the Islands of Scilly, a luxuriance no where else to be met with in Britain; and, I should venture to say, not excelled in any part of Europe.

"In the fissures of rocks, which form those peculiar carns or promontories which radiate in every direction, and are so remarkable a feature of the Islands, this fern grows most

* Mr. Cooke, whose residence is the "Ferns" Kensington, has made this province of the botanical kingdom his peculiar study.

superbly, attaining to the length of nearly thirty-three inches. At Peninnis Head, Porth Hellick, and other parts of the South Coast of St. Mary's, it is the most abundant: but I met with it on most of the rocks in St. Mary's, St. Agnes, and Tresco; the usual length of the fronds being twelve, fifteen, or twenty inches. The fronds are generally fertile, and often in confluent fruit. Its roots are black and brittle; and penetrate far into the crevices of the rocks, (which are chiefly of the very coarsest granite, and which, therefore, readily decompose,) and are attached so firmly that the plants are not obtained without much patience and difficulty.

"To the very congenial air of Scilly, the temperature averaging in summer 58°, and in winter 45°, may be attributed the perfection of this plant. The extreme saline influences to which these Islands are subject, are at the same time a favourable cause of no less importance.

"The difficulty, if not the impossibility of cultivating this species in the open air, away from the sea, is too well known to need comment: * but it luxuriates in the stove, and will bear any degree of heat, if accompanied by moist atmosphere. Specimens which I obtained from Scilly in September, 1848, are now growing very beautifully in my hot-house. They are planted between masses of sand-stone, and fruit abundantly. I saw some beautiful plants growing in a well near the Star Castle, St. Mary's.

Asplenium lanceolatum, a species whose habitat must be sought also, with few exceptions, near the sea-coast, as far

* The genera of Trichomanes and Hymenophyllum, also requiring perpetual moisture, can only be cultivated under bell glasses or in ward-cases; and these are, perhaps, of still more difficult culture.

as my observation extended, grows only in St. Agnes. Some specimens, which I found near the Light-house, were so much smaller than the Cornish species, and presented so distinct a character, that I think they may be considered as constituting a variety. Most of the fronds were fertile.

"*Asplenium adiantum nigrum*, or Black Spleenwort, I also found in St. Agnes; but did not meet with it elsewhere.

"I have also an impression that *Asplenium ruta-muraria* was growing on a stone wall in St. Mary's, between the town and Holy Vale.

"*Lastræa recurva*, so abundant in the West of Cornwall, I found but in one locality on St. Mary's; and I do not think it is likely to be met with in the off-islands.

"*Osmunda regalis*, or royal flowering fern, is very abundant in one (and I believe the only) locality, viz., the Marsh near Old Town, St. Mary's. In this spot, intersected as it is with water, this noble fern spreads over a considerable tract of swampy ground, attaining a very large size. The rich, amber colour of its luxuriant foliage presents in the autumn a most charming effect. Numerous small plants dispersed amidst the larger ones, and equally fertile, presented all the characters which belong to the *Osmunda gracile* of North America, being most exquisitely and delicately formed.

"In the Marsh also we met with *Lastræ filix-mas*, *Lastræa dilatata*, *and Lastræa spinulosa*, together with *Asplenium filix fœmina*, in great profusion. The two former species are also generally distributed in St. Mary's.

"*Polypodium vulgare* is abundant on the walls in St. Mary's and St. Agnes. It is very large and fine at Holy Vale.

"*Scolopendrium officinarum*, or common Hart's-tongue, I also saw in the well* before mentioned, but I do not recollect observing it elsewhere.

"*Pteris Aquilina* is generally distributed, but small."

The following is a list of the different genera and species which Mr. Cooke found here.

Osmunda Regalis, *Royal or Flowering fern.*
Asplenium marinum, *Sea Spleen-wort.*
——— adiantum nigrum, *Black-hair'd maiden.*
——— ruta muraria, *Wall-rue fern.*
——— lanceolatum, *Hudson's Spleen-wort.*
——— filix-fœmina, *Lady-fern.*
Lastrœa filix-mas, *Male-fern.*
——— recurva, *Bree's-fern.*
——— dilatata, *Broad shield fern.*
——— spinulosa, *A variety of the preceding.*
Polystichum lobatum, *Prickly fern.*
——— angulare, *A variety of the preceding.*
Polypodium vulgare, *Common poly-pody.*
Scolopendrium officinarum, *Common hart's-tongue.*
Pteris aquilina, *Common brake.*

The weather was very rough and stormy during Mr. Cooke's sojourn in the Isles, so that he was prevented visiting Bryher, St. Martin's, and Sampson, where he thinks it probable that he might have met with some other species.

* The well here meant, is that at the entrance of the Garrison, near the master-gunner's house. I may add, however, that this fern grows very luxuriantly at the mouth of a well near Newford Orchard, on St. Mary's. I have gathered a frond, this month (September), twenty-three inches in length, and several more somewhat shorter. It is also, I am nearly certain, found on Tresco.

The Geology

OF THE SCILLY ISLANDS.

Extracted from a Paper read before the Royal Geological Society of Cornwall in September, 1850.

The whole of the islands are composed of granite, and as there are no excavations worthy of the name of quarries, these remarks will apply to the granite only as it is seen on the surface.

It has been generally supposed that the granite of Scilly is a continuation of that of the Land's-end, but as in dredging between the islands and the main land, sea-weed is often brought up attached to bits of slate or greenstone; and as the Woolf rock, which lies not far southward of a line from the Land's-end to Scilly, is not granite but greenstone, there is reason to believe that a tract of slate or greenstone occurs between the Land's-end and the islands, and that the granite of the latter is a separate and distinct range.

The inclination or *strike* of the granite of Scilly is, with few exceptions, towards the N. or N. N. W. This is evident in many parts of St. Mary's, at New Grimsby in Tresco, and particularly on the northern coast of St. Agnes and

Annet, and in most of the islands and reefs west of St. Agnes.

In the few remarks which I can offer on this subject, I shall refer to

I. *The Jointed structure of the granite.*

It is impossible to view the granite of the islands without being struck with its intersection by lines—often very minute—in different directions: these are joints, and are easily mistaken for cracks. Whether they are the result of the contraction of the granite in cooling, or owe their existence to certain laws of crystallization, is not easy to decide. They are, however, more numerous at the surface than in deeper parts, and wherever they appear, although they may be less apparent in one part of a block than in another, they can generally be traced throughout the whole.

The direction of the joints appears so various and irregular, and many of them are so crossed and curved, that on a cursory view, it might be deemed impossible to reduce them to any general system; but a closer inspection will shew that (as in most granite districts) they may be divided into three series: 1. those which are horizontal, or nearly so, and parallel with what is called the *grain* of the rock, or the direction in which it may be most easily quarried. In this direction the granite of the islands is generally cloven, and the work is called "capping and quartering." 2. The vertical or perpendicular joints whose direction is generally N. and S. or perhaps N. N. W. and S. S. E. These, which are often inclined, may be called the *cleavage planes*, because, in most granite districts, the rocks are

cloven in this direction, it being found in practice the most convenient and economical. 3. The vertical joints having a direction varying from E. and W. to E. N. E. and W. S. W. These are generally inclined to the N. or N. N. W. parallel with the general dip or *strike* of the granite. When the rock is thickly jointed, the inclined masses seem to repose on each other like strata of slate, as on the western side of *Peninnis Head:* at *Watermill Bay*, the joints are so close to each other, and so highly inclined, as to give to the whole mass the appearance of stratified granite.

II. *The Disintegration and Decomposition of the granite.*[1]

There is little doubt that wherever joints occur, there is the commencement of decomposition, but, according to the quality of rock, it may be rapid, or very slow: generally, by the action of the elements, the lines gradually become fissures, which, more or less rapidly, make their way into the rock, and often cause an entire separation.

1. If the vertical and horizontal joints cross each other nearly at right angles, the rocks will appear to be divided into irregular quadrangular masses (as in the western groups at *Peninnis):* as decomposition proceeds, these will be gradually, and at length entirely, separated from the main body, and rounded at their edges and angles by the influence of the elements: if they are not much inclined, they may continue in their original position; but if otherwise, they will fall from the mass, and either remain in heaps near the foot, or

[1] It is often difficult to decide whether the effects are those of decomposition or of mere disintegration. With respect to the joints, it is possible that both may be in operation, but the rounding of the sharp points of the rocks, and the formation of the rock basins, have probably been effected by disintegration.

be rolled to a considerable distance.[1] Some may continue in detached perpendicular groups forming what are called *Tors*, (as at *Carn Leh, Dick's Carn, &c.)*; and rounded insulated rocks may be so placed on other rocks as to form what Dr. Borlase calls *Tolmens* (as the *Drum* rock, and a similar rock at the head of *Old Town porth)*. 2. When decomposition proceeds rapidly on the perpendicular joints, and has little effect on the horizontal ones, the rocks acquire a columnar form resembling basaltic pillars, the horizontal joints answering to the joints of basalt.[2] 3. If the perpendicular joints are very thickly inserted in the granite, with scarcely any horizontal joints, the whole mass, as the joints yield to decomposition, appears divided into large slabs standing upright; some entirely separate, whilst others are still united at the centre: one of the best instances of this may be seen at *Peninnis Head*. 4. The decomposition at the horizontal joints, where there are few vertical ones, produces groups of flat tabular masses or slabs, of which the upper ones frequently protrude far beyond those on which they stand. The *Pulpit* rock is a fine specimen of horizontal decomposition; others may be seen at the *Blue carn*, the *Clapper* rocks, and in many other parts. It is possible that the Logan stones may have been formed by similar decomposition.

A more interesting effect of decomposition, or rather

[1] It is almost impossible to observe the piles of loose rocks—many of them of immense size,—resting on the rocky beach between *Tolmen Point* and the *Giant's Castle*, without the conviction that they must have fallen from a higher situation.

[2] This is finely exhibited in the rocks at, and south of, the Land's-end of Cornwall, especially at Tol Pedn Penwith.

disintegration, appears in the *Rock Basins.* They are rarely seen on the rocks covered by the sea at high water, but otherwise they are so general that the rocks on whose surface they do not appear, form the exception. As they have been so particularly alluded to in this volume, nothing further need be said in the way of description. That they are artificial, as Dr. Borlase contends, is a doctrine now generally rejected; but a few of the facts which oppose it may be worthy of notice: some of these existed when Dr. Borlase wrote, and time has since furnished others. 1. They are deepest and most common where the rocks are most exposed to the prevailing winds and the spray of the sea. In St. Mary's they abound on that part which extends from the S. W. to the S. E. but are few and shallow in the other parts of the island. 2. Some of them appear in the sides of the rocks, just as if, after they had been formed on the top, the rocks had been overturned: they may be thus seen near *Pitt's parlour* at *Peninnis*, and also at the *Clapper* rock. 3. In some cases, when one rock is overlaid by another, basins are formed on the lower rock: this occurs at the *Clapper* rock, and also near the *Sun* rock, but the best instance may be seen about a quarter of a mile north of the *Sun* rock, where a large block of granite rests on another block imbedded in the ground, the space between the two rocks being only a few inches: on the surface of the lower rock are three regular basins, which could not have been worked out by tools: the top of the upper rock has also several basins. 4. The disintegration in the basins is still proceeding: loose particles of quartz and

felspar are commonly found in them, and in several, there are openings in the sides or at the bottom, some of which have taken place within the recollection of persons now living. 5. On the rising ground above *Porth Loggos*, there is an immense flat rock, nearly level with the ground, said to be 173 feet long, and 138 feet wide, of which Dr. Borlase says "We found the back of the rock cleaved by art (at least as it seemed to us) of all unevenness, and making one plane of rock." This was written about one hundred years ago: its surface is now covered with small basins, drains, and shallow excavations.

It is not impossible that the rock basins, as well as the Logan stones and other natural monuments, might have been used by the Druids for superstitious purposes, but the facts already stated are sufficient to prove that they have not been formed by art, but by disintegration, caused by the alternate action of the elements on rocks peculiarly favorable to their operation, either from a mixture of iron or some other extraneous substance in their composition, or from the peculiar arrangement of the crystals of the different constituent parts.

In those parts of the coast which are exposed to the prevailing winds and the lash of the waves, the rocks are weathered into the most singular and fantastic forms, as at *Peninnis* and the *Clapper* rocks in St. Mary's, the *Nag's head* in St. Agnes, &c. In the latter island some of the rocks resemble gigantic petrified mushrooms. Decomposition is also often visible on the flat surface of the rocks, as at the *Lizard* point in Tresco. The existence of white clay in

Holy Vale moor, and in the moors between *Porth Mellin* and *Old Town*, is also an indication of it below the surface.

III. *Regenerated or Secondary Granite.*

There are many instances in the islands in which, at first sight, it appears doubtful whether the granite is in the process of disintegration, or whether the constituent parts which had been previously separated by disintegration, have become re-united (by what agency it is difficult to say) before they were completely decomposed. This kind may be found on *Rat island*, and at *Piper's hole* in St. Mary's; at *Piper's hole* in Tresco; and in numerous other localities. The principal reason for supposing it to be regenerated granite is that, in both the caverns alluded to, of which it forms the whole or the principal part of the roof, it contains bowlders or rounded masses of perfect granite,—some of them pretty large: it is not easy to suppose that these could have been enclosed in original granite.

Unless these bowlders may be supposed to be the remains of ancient beaches, I have not observed on the islands any of those remains: it is not improbable however that they may be visible in the roofs of other caverns which I have not examined.

IV. *Varieties of Granite.*

The granite of Scilly is not always confined to the usual constituent parts of quartz, felspar, and mica: shorl is a very common ingredient, sometimes accompanying the mica *(Lizard point, Tresco)*, and sometimes replacing it *(Old Town porth)*: hornblende is a more rare one *(Old Town porth)*, and chlorite still rarer. In some parts it is porphyritic

(Watermill bay); but in general that term is not applicable to it: the felspar is sometimes of a deep red colour *(Old Town porth,—Porth Munick,—The Cow rock)*. In one locality *(Lizard point, Tresco)* the mica of the granite is in its primitive crystal, a solid rhomboid being formed by the accumulation of rhomboidal tables: in other parts the mica is in hexagonal tables, often forming prisms by their accumulation *(Peninnis)*: on *Taylor's* island, the mica is replaced by minute prisms of tourmaline, often with a perfect termination. Binary granite, composed of only two of the usual ingredients, occurs at *Porth Hellick*, both as quartz and felspar, and as quartz and mica.

The granite of Scilly is, in general, of a rather coarse quality, and from its colour, iron appears to be frequently associated with it. No doubt there is excellent granite in several of the islands, but it is often so mixed up with what is inferior, that there is little hope of its being extensively quarried for exportation: it is possible however, that the compact granite may run in courses or ranges through the coarser or softer kinds: this might be discovered without much difficulty by following it so far as to ascertain its direction, and examining the granite in different parts in that direction. There is very compact granite at *Peninnis*, but close to it there is some of a very different kind. The best, I think, may be found in some of the western islets, particularly in *Rosevear*, of which a specimen may be seen in the habitations of the St. Agnes light-house men: that of the *Bishop*,—the most western rock of the whole group,—is also very compact, although a little discoloured.

V. *Veins in the Granite.*

These are of various kinds. Sir H. De la Beche has remarked that granite veins in the granite are not unfrequent in St. Mary's, St. Martin's, Tresco, Brehar, and St. Agnes: some of these, however, owe their vein-like appearance to an accumulation of parallel joints, and the decomposition of the granite on each side of them. The granite of the veins is almost always much finer than that of the mass. The red granite is generally found in veins (*Old Town* and *Brehar*). I believe them to be all contemporaneous or as nearly so as possible.

Veins of pure white quartz,—sometimes of a considerable size.—often intersect the granite: in one of these, at *Peninnis head*, I found a small bunch of rose-coloured quartz: in another vein between St. Mary's pier and Rat island, (now covered by the new pier) chalcedony has been found.

At *Watermill bay*, in St. Mary's, the pebbles on the beach indicate the contiguity of porphyry and porphyritic granite, and on the south side of it, between the rivulet and the curious little quay called *Newquay*, there is what has been called by some an *elvan course*, and by others a mass of decidedly stratified granite: it is of considerable length: it rises above the granite that joins it on each side, and seems to lie in thick strata, which are subdivided into smaller strata, dipping at a large angle about N. N. W.: it is decided porphyry with small crystals of quartz and felspar: the adjoining granite has also the same stratified appearance. The question is, whether the lines of division of the apparent strata are joints, or whether the whole has

a slaty structure: the former appears to me the most probable. This spot must be visited at low-water, or the most interesting part will be covered by the sea.

Of metalliferous veins or lodes, there are some in three or four of the islands, but none which any competent miner would suppose had ever yielded any considerable quantity of tin. Several years ago, in digging for a foundation for the store-keeper's house within the lines of the Garrison hill, a lode was discovered which produced some tin very near the surface, but the quantity, and the lode itself, being very small, it attracted no further attention. In the small uninhabited island of Norwethel, some lodes are visible in the cliffs, and efforts have been frequently made to explore them, but unsuccessfully. In Tresco there are some lodes, on one of which near *Piper's hole* are the only remains of former works now existing in any of the islands: these, however, give no indication of extensive or important operations. *Piper's hole* has been called an adit for draining the mines, but it is far too irregular to admit such a supposition. *Piper's hole* in St. Mary's is more regular, and may possibly have been used for that purpose.

As so much has been already said and written on the question whether the tin of ancient times was the product of the Scilly islands, I will add only two remarks to those which I have elsewhere made on that subject. 1. Dr. Borlase supposes that a great subsidence of the land has taken place, by which almost all the marks and relicts of ancient mining have been submerged; but this is not only gratuitous, but inconsistent with another conjecture of his,—

that *Piper's hole* in Tresco was the adit of the ancient tin-work there: if it were so, it is evident that no subsidence of the land can have taken place since. 2. There are two tracts of low land in St. Mary's; one extending from *Porth Mellin* to *Old Town;* the other, from *Holy Vale* to *Porth Hellick.* In Tresco also there is a low tract from New Grimsby, by the Abbey ponds, to the south-east side of the island. Now if any mines here had ever been productive of tin, some traces of diluvial tin would, even in modern days, be found in these low grounds; but in neither of them has any tin-ore ever been discovered, as far as can be known from the testimony of the living, or the records of the past; neither has any tin-ore ever been found pulverized amongst the sands of the sea shore, as it frequently is in the mining parts of Cornwall which border on the sea; I see no reason therefore to alter the opinion expressed elsewhere,[1] that the tin of the *Cassiterides* could not have been the product of the Scilly islands, but was probably that of the nearest land—St. Just, which being visible from Scilly, might easily have been taken for a large island, and included in the group to which was given the name of the *Cassiterides.*

VI. *The Sands of the Islands.*

These are more diversified than might be expected in such a small tract. Those which are found on the southern coasts are generally coarse and gravelly, as at *Porth Hellick, Old town porth,* and *Porth Cressa,* whilst those on the northern shores are usually very fine, as at *Porth Mellin* and the *Pool.* The sand of *Porth Mellin* is the most inter-

[1] Cornwall Geol. Trans. Vol. 2, page 357.

esting of the whole: here, at low-water, on the surface of the beach, which is composed of almost impalpable particles of quartz,—so fine as to be generally used for scouring household utensils,—may be seen ridges of black mica: they are not always in the same situation, but are moved about by the tide: there is very little mica, and that in the minutest particles, below the surface of the sand. The granite of *Carn Thomas*, which adjoins this porth on the west, contains black mica, and at the foot of the *carn* the granite appears to be decomposing: this however will not account for so much being found on the beach at *Porth Mellin*, while in many other coves, where the granite around them is similarly composed, scarcely any mica can be seen on the sands: it is difficult to conjecture how, after the dissolution of the felspar and the minute reduction of the quartz, the mica should have remained, in larger particles, on the surface: is it possible that a gentle current may convey it there from some other part? Eastward, the sand of the *Bar* is quartzose, but less fine, with a very small admixture of shell: in the sand of Pellestry bay alone is there a mixture of comminuted shells sufficient to make it very useful for manure: other sands are frequently used for that purpose, but their principal virtue is probably that of loosening close or clayey soils.

On the southern side of Tresco, the sand consists almost entirely of large particles of pure white quartz, which might probably be used in the manufacture of porcelain, instead of pounded flint; but I am not aware that it has ever been tried.

It will be observed that in this communication I have

said nothing of St. Martin's island, or of the eastern islands, and little of Brehar, or Samson. In truth I had not sufficient time to examine them: they must be left for another "week's visit to the islands."

ERRATA.

Page 20. line 1, for 'erected' read 'enriched'
— 65. for 'Pernagic' read 'Pernagie'
— 73. line 20, for 'Crasou' read 'Crassou'
— 92. line 13, for 'Ministers' read 'Musters'
— 129. line 13, for 'statutes' read 'statues'
— 131. Note. for 'Woodley' read 'Borlase'
— 154. line 6, for 'subulated' read 'sabulated'
— 155. line 12, for 'anglorm' read 'anglorum'

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BY THE SAME AUTHOR.

A SERMON

PREACHED AT THE ARCHDEACON'S VISITATION,

SIX-PENCE.

1849.

A VOLUME OF SERMONS

ON THE LITURGY.

TEN SHILLINGS.

1844.

A BRIEF MEMOIR

OF THE

REV. HENRY NORTH.

ONE SHILLING AND SIX-PENCE.

1839.

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